Insurance Information Institute

Insurance Facts

1988-89 Property/ Casualty Fact Book

Property/Casualty Insurance at a Glance

The property/casualty insurance business early in 1988 comprised about 3,800 individual companies which operate in a highly competitive environment. Although about 900 of those companies write most of the business, no single company or group has more than 10 percent of the market.

In 1987, property/casualty insurance companies employed some 528,900 persons, according to government statistics. An additional 603,600 persons were engaged in agency or brokerage operations and insurance service organizations on behalf of the insurance industry as a whole, including the property/casualty, life and accident and health segments.

Operating Results, Property/Casualty Insurance, 1983–1987
(000 omitted [thousand dollars figures])

	1987	1986	1985	% Change 1986–87	% Change 1985–86
Assets	$426,210,547	$374,088,083	$317,263,665	+14.1%	+ 20.1%
Net Premiums Written	193,245,779	176,552,070	144,186,420	+ 9.5	+ 22.4
Premiums Earned	188,989,175	166,381,186	133,241,852	+13.6	+ 24.8
Losses and Adjustment Expenses Incurred	147,379,897	130,769,622	118,573,435	+ 8.6	+ 14.5
Loss and Loss Adjustment Ratio	77.98%	81.60%	88.02%	- 4.4	- 8.2
Underwriting Expenses Incurred	49,045,206	44,542,343	37,595,418	+10.1	+ 18.5
Underwriting Expense Ratio	25.37%	25.21%	25.95%	+ .6	- 2.8
Combined Ratio (before Dividends to Policyholders)	103.35%	106.83%	114.87%	- 3.3	- 7.0
Combined Ratio (after Dividends to Policyholders)	104.69%	108.43%	116.62%	- 3.5	- 7.2
Statutory Underwriting Gain (Loss)	(7,078,243)	(15,747,925)	(22,597,992)	-55.1	- 39.2
Dividends to Policyholders	2,546,358	2,164,960	2,196,242	+17.6	- 1.4
Net Underwriting Gain (Loss)	(9,624,301)	(15,912,894)	(24,793,529)	-39.5	- 35.8
Net Investment Income	23,959,981	21,924,445	19,507,869	+ 9.3	+ 12.4
Operating Earnings after Taxes	10,988,410	6,840,383	(3,327,453)	+60.7	-756.6
Policyholders' Surplus	103,996,200	94,288,290	75,511,417	+10.3	+ 24.9
Premium to Surplus Ratio	1.86 to 1	1.87 to 1	1.91 to 1		
Dividends to Stockholders	4,364,702	2,606,818	2,703,108	+67.5	- 3.1

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

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The Insurance Information Institute operates a toll-free hotline to provide media representatives and consumers with immediate answers to their questions about property/casualty insurance. The number is 1-800-221-4954.

Insurance Facts

1988-89 Property/ Casualty Fact Book

Insurance
Information
Institute

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This yearbook is intended to provide some basic facts relating to the property and casualty insurance business for editors, writers, speakers, teachers, students, insurance people and others.

Insurance Facts is published annually by the Insurance Information Institute, an educational, fact-finding and communications organization for the property and casualty insurance business. The Institute is supported by some 300 insurance companies, both stock and mutual, and also provides public relations services to other organizations in the fields of property, liability, fidelity, surety and marine insurance.

The cooperation of other insurance organizations, government agencies and commercial publishers of insurance data has helped to make this yearbook possible. We are particularly grateful to A.M. Best Company, Inc., for making available some of its compilations of insurance statistics, to the National Fire Protection Association for permitting us to publish certain of its copyrighted data concerning fire losses, to the National Safety Council for its cooperation in providing certain accident-related data, and to the Insurance Institute for Highway Safety and the Highway Loss Data Institute for their assistance in preparing automobile data.

Mechlin D. Moore, President
Insurance Information Institute

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Overview of Insurance

The business of insurance in the United States is divided into three broad categories: life insurance, health insurance and property and casualty insurance. Altogether it provides more than 2 million jobs and has responsibility for assets which at the end of 1987 totaled more than $1.47 trillion. But its greatest significance in the American economy is as an absorber of personal and business risks.

The property/casualty segment of the insurance business is responsible for assets which at the close of 1987 totaled more than $426.7 billion. It provides hundreds of forms of financial protection against virtually every known peril.

Data compiled by the U.S. Bureau of Labor Statistics (BLS) show that property/casualty insurance companies employed some 528,900 persons in 1987. BLS estimates that another 603,600 persons were engaged in agency or brokerage operations and insurance service organizations, but does not distinguish between personnel employed in the life insurance or health insurance business and those with responsibilities in the property and casualty field.

As of 1988, there were more than 6,000 insurance companies based in the United States and operating under the supervision of regulatory authorities in the various states. Some of these companies sell all lines of insurance; many specialize in one or more fields. Some 3,800 of those companies sell some form of property and casualty insurance, and related lines, including inland marine coverages and surety and fidelity bonds. A vast majority of the property/casualty business is written by about 900 companies that operate in all or most states.

The property and casualty insurance business plays a major role in keeping the American economy moving. Insurance coverages backstop the extensive commercial and consumer credit system of the nation. Further, surety bonds are required on almost all public works and commercial construction, to protect against loss in the event the contractor fails to fulfill his or her obligations.

In large part because of insurance coverage, Americans—business owners and employees, home owners, and car owners—have more financial protection and a greater sense of security than any people anywhere have ever enjoyed in the history of the world.

Property/Casualty Insurance in 1987-1988: A Review

The property/casualty insurance industry's earnings continued to improve in 1987. The consolidated net income after taxes totaled $14.4 billion, an increase of 9.9 percent from the $13.1 billion recorded in 1986. The net income comprised $14.4 billion of pre-tax operating income and $3.3 billion of net realized capital gains, offset by income taxes of $3.3 billion.

Profit (Loss) in the Property/Casualty Insurance Business, 1987

(Figures are in billions of dollars.)

Earned premiums	$189.0
Incurred loss (including loss adjustment expense)	− 147.4
Underwriting expenses	− 49.0
Policyholder dividends and other minor items	− 2.2
Underwriting loss	(9.6)
Investment income (dividends and interest)	+ 24.0
Operating gain	14.4
Realized capital gains	+ 3.3
Income taxes	− 3.3
Net after-tax income	$ 14.4

The improvement in the industry's profitability in 1987 was attributable to several factors. Revenues earned from premiums increased by 13.6 percent over those of 1986, while losses plus expenses rose at a lesser rate of 8.9 percent. Although the industrywide underwriting loss was substantial at $9.6 billion, the figure was almost 40 percent lower than the loss recorded in 1986.

Another important element in the equation is investment income, the interest and dividends earned from assets, which increased by 9.3 percent, to $24 billion from $21.9 billion in 1986.

The industry's combined ratio (after dividends to policyholders) was 104.69 in 1987, an improvement of 3.44 points or 3.2 percent from the ratio of 108.13 in 1986.

The favorable operating results of 1986 and 1987, achieved in spite of continuing underwriting losses, suggest that the industry has recovered from the unprecedented financial morass through which it struggled in 1984 and 1985, which produced record operating losses and a record number of company insolvencies (41 during the two-year period). That crisis was attributed primarily to two factors—pressures on costs from mushrooming growth in litigation and pressures on pricing from intense competition.

Premium growth slowed down sharply in 1987, reflecting lower rates of increase in insurance prices. Net premiums written increased by 9.5 percent in 1987, to $193.2 billion from $176.6 billion in 1986. The increase was less than half those recorded in 1986 and 1985—22.4 percent and 22 percent, respectively.

With policyholders' surplus at $104 billion at the end of 1987, the rate of return for the industry was 13.2 percent, slightly below the 13.9 percent rate of return recorded in 1986. Policyholders' surplus, the capital that provides protection against unexpected or catastrophic losses, rose by only 10.3 percent in 1987 after increasing by 24.9 percent in the preceding year.

A key factor in holding down surplus growth in 1987 was the industry's experiencing of some $3.3 billion of unrealized capital losses. Details of the changes in surplus in billions of dollars are shown below.

Changes in Surplus, 1986–1987

(Figures are in billions of dollars.)

Surplus, end of 1986		$ 94.3
Changes in 1987:		
Net after-tax income	+$14.4	
Unrealized capital losses	− 3.3	
New funds	+ 4.0	
Less stockholder dividends and other items	− 5.4	
Net change	+ 9.7	
Surplus, end of 1987		$104.0

While the overall operating results of the property/casualty industry continued to improve in 1987, a number of factors and actions occurred that influenced the 1987 results and likely will affect the future of the industry.

Impact of Black Monday

The stock market decline in the fourth quarter of 1987 caused at least a $9.9 billion loss in value of the industry's capital:

Unrealized capital loss	$9.4 billion
Realized capital loss	.5 billion
Total capital loss	9.9 billion

The unrealized capital loss of $9.4 billion in the fourth quarter reflects a loss in the value of the industry's assets, and was a major factor affecting the relatively small growth in the industry's policyholders' surplus in 1987.

Antitrust Lawsuit

The state attorneys general of California, New York, West Virginia, Alabama, Massachusetts, Minnesota and Wisconsin filed antitrust lawsuits in federal District Court in San Francisco on March 22, 1988. The suits charged that major insurance companies and industry associations conspired to create a global boycott of certain types of commercial general liability coverages, particularly coverage for environmental damages stemming from pollution. Texas filed a suit separately in a state district court. Arizona shortly thereafter joined the federal suit.

On June 14, 1988, 10 more state attorneys general announced they had joined the federal lawsuit: Alaska, Colorado, Connecticut, Maryland, Michigan, Montana, New Jersey, Ohio, Pennsylvania and Washington. In

addition, about 20 private lawsuits were filed, with charges very similar to those filed by the attorneys general.

The litigation focuses on a very narrow aspect of the overall insurance marketplace—the development of new policy language by the authorized organization within the industry (the Insurance Services Office, or ISO). The suit alleges that the defendants engaged in a secret "global conspiracy" to draft restrictive policy language. The attorneys general further alleged that the insurer "conspiracy" to develop restrictive policy language led to the 1984-85 liability insurance crisis.

The property/casualty insurance industry has responded vigorously to the charges. The industry pointed out that the policies in question were developed by ISO over a period of two years in consultation with customers, regulators, agents and brokers; that the policies were the subject of many public hearings, and that they were revised several times before being approved by every state where they were put in use. The industry contends that the litigation thus puts the industry in the impossible position of defending actions that were required and approved under state laws.

Late in June 1988, attorneys for plaintiffs and defendants agreed on basic procedural guidelines at a status conference. The judge has ordered that all motions must be filed by Dec. 16, 1988, with responses due April 28, 1989, and replies due June 16, 1989. Judge William W. Schwarzer, who will hear the case, noted that the cases center on two basic issues: first, whether joint industry actions on matters of policy forms violated state antitrust laws; and second, the extent of any violation. In September 1988, the Judicial Panel of Multidistrict Litigation ruled that 18 of the 20 private class-action suits can be combined with the 18 suits filed by the state attorneys general.

"No-Fault" Automobile Insurance

The term "no-fault" auto insurance often is used loosely to denote any auto insurance program that allows the policyholder to recover financial losses for bodily injury from his or her own insurance company, regardless of fault. However, in its strictest form, no-fault applies only to state laws that both provide for the payment of "no-fault" first-party benefits and restrict the right to sue. Motorists may sue only if the case meets certain conditions.

These conditions, known as a threshold, may relate to the severity of injury defined by either verbal thresholds or dollar thresholds (medical bills) incurred as a result of an accident. Currently only 14 states and Puerto Rico have no-fault auto insurance laws which restrict the right to sue.

Efforts to create or reform no-fault auto insurance programs have been most active in three states—New Jersey, Massachusetts and California.

New Jersey: Spurred on by thousands of angry letters from the state's drivers, the New Jersey legislature debated several bills aimed at reforming the auto insurance program and reducing the state's highest-in-the-nation auto insurance costs. One of the major barriers to enacting a verbal threshold no-fault program which eventually would lower insurance premiums was opposition from New Jersey trial lawyers.

A study by the New Jersey Department of Insurance showed that car insurance bodily injury rates would rise 75 percent over the next five years if laws were not passed to limit pain and suffering awards. The number of auto-related claims in New Jersey spiraled from 16,430 in 1973, when the state's no-fault law was enacted, to 34,405 in 1987, an increase of 109 percent, while the number of licensed drivers increased less than 20 percent.

A compromise bill was finally signed by Governor Thomas Kean in September 1988, allowing policyholders to choose either a verbal threshold or no threshold at all. Those picking the verbal threshold would receive a reduction in premium.

Massachusetts: A joint committee of the Massachusetts legislature in 1987 approved a sweeping auto insurance reform bill that would have replaced the current $500-tort threshold with a verbal threshold. However, the proposed verbal threshold was opposed by the Massachusetts Trial Attorneys Association which contended that a verbal threshold denied accident victims their right to sue. Another reform bill omitted the verbal threshold, but raised the $500 threshold to $1,250. As of October 7, the legislature had taken no final action on either bill.

California: The California legislature's failure to pass legislation that would reduce the cost of auto insurance in the state resulted in five propositions (initiatives) being placed on the November 1988 ballot. The insurance industry gave its support to two propositions—104 and 106.

Proposition 104 calls for establishing a no-fault auto insurance system and includes a basic benefits package, guaranteed payment of all valid claims within 30 days of proof of loss, and a mandatory two-year, 20 percent rollback of the statewide average rate for bodily injury liability and uninsured motorist coverages. The bill also would limit attorney contingency fees in auto accident cases.

Proposition 106—Lawyers Fair Fee Act—would limit lawyers working under the contingency fee system to 25 percent of the first $50,000 of an award, 15 percent of the next $50,000 and 10 percent of any amount in excess of $100,000. The trial lawyers contend that these limits are too low; that attorneys would stop taking cases on a contingency fee basis, and thus deprive many citizens of recourse to the legal system.

A survey commissioned by the California Department of Insurance shows that Los Angeles ranks 96 percent to 111 percent higher than the state's average in the frequency of liability claims, the cost of claims involving auto

insurance and the number of claims involving uninsured motorists. Claim frequency and costs in Los Angeles accounted for the higher auto insurance rates there and, conversely, for lower rates in San Diego.

The study also shows that if the current system of territorial rating were abolished, two-thirds of the state's insured motorists would pay an average 22 percent rate increase, while one-third would receive a decrease of 36 percent. The survey included the state's 10 largest cities and covered the period from 1984 to 1986.

The Civil Justice System

During 1987, insurance industry trade associations joined with members of the business community throughout the nation to press for tort reforms that would restore fairness to the civil justice system. Their agenda for change focused on four key areas: abolition of joint and several liability; modification of the collateral source rule; reinstitution of the state-of-the-art defense; and limitation on punitive damages. Some type of tort reform legislation was enacted by 32 states in 1987.

Tort reform is not the only way to reduce the cost of resolving disputes. A steadily increasing number of legal experts believe that in certain cases disagreement among parties can be settled as effectively, and at a lower cost in terms of money and time, through techniques that bypass the traditional court system. Based on arbitration or negotiation, these have become known as alternative dispute resolution mechanisms or ADRs. There are now 350 ADR programs operating in 46 states, and 25 states have enacted legislation to encourage the use of ADR techniques. According to Arbitration Forums, Inc., a nonprofit arbitration organization, there was a nine percent increase in its arbitrated claims in 1987. The number of cases, nearly 250,000, represented $500 million in claims.

Catastrophe Losses in 1987

Insured catastrophe losses in 1987 were estimated at $905 million, an increase of 3.8 percent over the $871.5 million recorded in 1986. This is the first time since 1977-78 that catastrophe losses have been less than $1 billion for two consecutive years—1986-87.

During 1987, 24 catastrophes were recorded which affected portions of 27 states. Only two had insured property damage of over $100 million. However, the October 1 earthquake in southern California focused attention on questions of preparedness, prediction and insurance.

The worldwide insurance market was affected when a freak hurricane slammed into southern England, including London, in mid-October. Claims from the hurricane and subsequent flooding are expected to exceed $1 billion.

Congressional Action

Congress frequently focused its attention on issues of interest to the insurance industry during 1988. However, only a few bills primarily concerned with the property/casualty business made significant progress in either the House or the Senate.

The Price-Anderson Act, which governs liability in the event of an accident at a civilian nuclear facility, was renewed and amended by a proposal signed by the President in August. The new law extends Price-Anderson for 15 years and increases the nuclear liability cap 10-fold from $710 million to $7.1 billion.

For the first time, in June, a Congressional panel endorsed changes in the McCarran-Ferguson Act. This 1945 law gives the states primary responsibility for the regulation of insurance and provides the industry with a limited exemption from federal antitrust laws. A bill approved by the House Judiciary Subcommittee on Monopolies would add price-fixing, allocation of territories among competitors, tie-in arrangements and monopolization to the list of actions by insurers that now are explicitly prohibited under federal law. The present system of state regulation would remain intact under the plan. No significant action was taken in the Senate on this issue.

Also in June, legislation which would establish a uniform federal standard of liability for manufacturers and sellers of most products passed the full House Energy and Commerce Committee after lengthy, contentious debate. Included in the bill is a provision calling upon the U.S. Secretary of Commerce to gather data on the insurance industry from state regulators. The measure was referred to the Judiciary Committee, where it remained until Congress recessed.

Proposals to give banks expanded insurance and securities powers passed the House Banking Committee and the Senate in 1988. Under the Senate plan, insurance sales would be restricted to those banks that are headquartered and operated within a state that permits them to sell insurance. The House counterpart bars banks from entering the insurance underwriting business, but would allow some insurance sales by banks. The full House was unable to consider banking deregulation before the Labor Day recess.

A bill which would have required employers to notify past and present employees about workplace health hazards failed to overcome a procedural obstacle on the Senate floor and died in early 1988. This so-called high risk notification legislation had appeared to have a promising future in 1987.

Commercial fishing vessel safety legislation finally became law after protracted debate among interested parties. The measure requires vessels of all sizes to carry various types of on-board safety equipment. Provisions to establish a workers' compensation-like system for temporarily injured fishermen was removed from the bill due to opposition from plaintiffs' attorneys.

Property/Casualty Insurance Companies by State

The property/casualty insurance business in the United States comprised 3,799 individual companies early in 1988, according to information provided by the insurance departments of the various states. About 900 of the 3,799 companies operate in all or most states and write a vast majority of the business. The other companies perform vital insurance services limited to people in sharply defined geographical areas or to members of specialized groups, such as farmers.

Home offices of the companies are scattered among the 50 states and the District of Columbia. Thirty-five states house 30 or more companies each. The state with the greatest number of company home offices is Illinois, with 294, followed by Texas with 291, Missouri with 204, and Wisconsin with 202.

The number of property/casualty insurance company home offices in each state and the District of Columbia is listed below.

Property/Casualty Insurance Companies by State, 1987

State	Home offices	State	Home offices
Alabama	30	Montana	15
Alaska	12	Nebraska	78
Arizona	31	Nevada	6
Arkansas	28	New Hampshire	49
California	154	New Jersey	66
Colorado	54	New Mexico	14
Connecticut	46	New York	200
Delaware	96	North Carolina	71
District of Columbia	12	North Dakota	41
Florida	80	Ohio	160
Georgia	60	Oklahoma	56
Hawaii	13	Oregon	19
Idaho	15	Pennsylvania	201
Illinois	294	Rhode Island	21
Indiana	121	South Carolina	32
Iowa	201	South Dakota	52
Kansas	33	Tennessee	53
Kentucky	38	Texas	291
Louisiana	51	Utah	12
Maine	21	Vermont	125
Maryland	34	Virginia	49
Massachusetts	50	Washington	26
Michigan	60	West Virginia	17
Minnesota	176	Wisconsin	202
Mississippi	18	Wyoming	11
Missouri	204		

Source: State Insurance Departments

Employment in Insurance

Employment in the insurance industry in the United States passed the 2 million mark for the first time in 1987, according to data compiled by the Bureau of Labor Statistics of the U.S. Department of Labor (BLS). The 1987 figure was up by about 4 percent from that of 1986.

BLS tallied the number of employees working directly for insurance companies at 1,418,200, representing an increase of just under 4 percent from the previous year's total. Employment by property/casualty insurers was up by almost 6 percent, from 499,600 to 528,900.

The government agency estimated the number of agents, brokers and service personnel in all segments of the business at 603,600, about 5 percent more than in 1986.

BLS reported that more than 64 percent of all persons employed in the industry in 1987 were women.

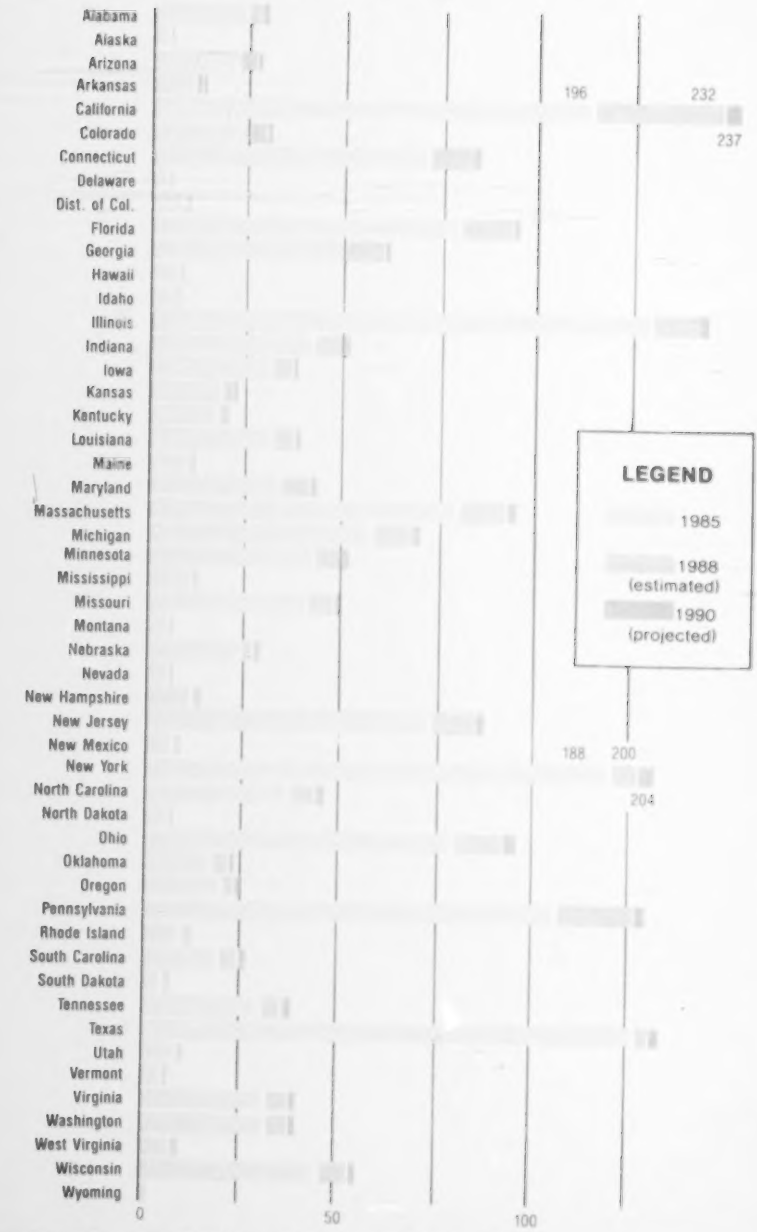
An industry source, the Research Department of the Alliance of American Insurers, reported in a booklet published early in 1988 that more than half the states have more than 25,000 insurance workers each (see chart on page 14). The leading states in that respect, according to the Alliance, are California (with an estimated 232,000 insurance employees in 1988), New York, Texas and Pennsylvania.

The Alliance estimated the insurance industry's payrolls at nearly $57 billion in 1988, and said the figure is expected to increase by another $5.7 billion by 1990. The 1988 payroll totals were estimated at more than $1 billion in each of 16 states, as reflected by the chart on page 15.

Employment in Insurance 1978–1987
(Annual Averages)

Year	Property/casualty companies	Other companies	Agents, brokers & service personnel	All-industry
1978	446,900	726,900	403,000	1,577,000
1979	467,600	732,200	430,100	1,629,900
1980	477,100	747,000	452,300	1,676,400
1981	478,000	758,460	465,600	1,702,000
1982	478,500	759,300	476,200	1,714,000
1983	469,300	760,000	490,700	1,720,000
1984	467,600	771,700	517,500	1,756,800
1985	474,900	817,000	541,500	1,833,400
1986	499,600	865,700	573,900	1,939,200
1987	528,900	889,300	603,600	2,021,800

Source: Bureau of Labor Statistics, U.S. Department of Labor



Source: Research Department, Alliance of American Insurers (reproduced with permission).

Insurance Industry Payrolls by State (in millions of dollars)

Source: Research Department, Alliance of American Insurers (reproduced with permission).

Ownership of Insurance

Some 95 percent of the nation's home owners, but fewer than 25 percent of people who rent their homes, carry household insurance to protect themselves against potentially disastrous financial losses. This was among the findings of a countrywide survey conducted by Cambridge Reports, Inc., for the Insurance Information Institute in July and August 1986.

The study found that more than two of every three Americans (69 percent) owned their homes and that fewer than one of every three (27 percent) were renters.

The survey reflected a slight increase, since the last similar study in April 1984, in the percentage of home owners who carry household insurance. By contrast, the percentage of renters who have insurance on their household contents and personal possessions dropped about five points over the same period. Interestingly, about 2 percent of the home owners and 8 percent of the renters who responded to the 1986 survey were not sure whether or not they were insured.

A demographic focus on the renters revealed these significant findings:

- About 50 percent of college graduates who rent their homes carry household insurance. By contrast, about 80 percent of renters with less than a high school education said they did not carry such coverage.
- Persons under age 46 are less likely to carry renters insurance than are older persons.
- Some 26 percent of renters who are white, but only 14 percent who are black, have renters insurance.
- Only 8 percent of renters who live in the Northeast have renters insurance. In other areas of the nation, the percentages who have coverage range from 19 percent in the Pacific area to 46 percent in the Midlands.

Respondents to the 1986 survey were not asked whether they carry automobile insurance. However, an I.I.I. survey conducted five years earlier indicated that some 92 percent of all car owners have that protection.

Insurance Coverage Reported by U.S. Households

	% of public	Have insurance	Don't have insurance	Not sure
Home Owners				
1986	69%	95%	3%	2%
1984	67	93	4	3
Renters				
1986	27%	23%	69%	8%
1984	29	28	65	8

Source: Insurance Information Institute

The United States accounted for about 43.2 percent of the world's insurance premium volume in 1986, according to a study by the Zurich-based Swiss Reinsurance Company.

Swiss Re's annual study of world insurance, published in the May 1988 issue of its economic newsletter, Sigma, included for the first time the People's Republic of China and five Eastern European countries with premium volumes equivalent to at least $100 million in U.S. dollars. The European countries are the German Democratic Republic, Yugoslavia, Czechoslovakia, USSR and Hungary.

The world's premium income was tabulated at $858.5 billion in 1986. Although the inclusion of the five Eastern Bloc nations and China meant that the 1986 premium volume could not be compared with those of previous years (the free world total in 1985 was tallied at $629 billion), Swiss Re said it supplemented the 1985 statistics with corresponding information on the added countries in order to compare at least the nominal growth rates, adjusted to take into account exchange rate fluctuations, with those of the previous year.

On that basis, the nominal growth rate in 1986 over 1985 was shown to be 30.7 percent, as compared to a growth rate of 26.6 percent in 1985.

The analysts projected the computations by another step, however, noting that the most meaningful growth rates can be obtained by weighting the real growth rates of total business in each individual country with its world market share. The study report said premium income for 1986 on that basis increased by a real 17.6 percent as compared with 1985. That growth rate amounts to about five and a half times that (3.1 percent) of world gross national product.

In spite of high growth rates, North America's (United States and Canada) share of the world insurance market declined in 1986, although it was still far out in front of the other continents with a 45.5 percent share. Without taking into account China and the Eastern Bloc countries, North America's share amounted to about 47 percent, as compared to 50.4 percent in 1985. For a summary of insurance premiums by continent, see the second table on page 18.

While the United States again dominated the world market in 1986 (see the first table on page 18) with a premium volume of more than $371 billion, Japan continued to strengthen its second-place position with a volume of $170 billion and a 19.8 percent share of the market. Those findings reflected a strong gain since 1984, when Japan had a 14.78 percent share of the free world market (exclusive of China and the Eastern European nations).

In non-life insurance, world premium volume rose by 25 percent in 1986 to $447.5 billion. However, the non-life segment's share of total business declined to 52.1 percent from 54.6 percent in 1985. By comparison, world life insurance premiums climbed by 37.5 percent to $411 billion, and

Swiss Re commented that if the same above-average growth persists in the future, life insurance will soon overtake non-life worldwide in terms of premiums.

Japan, Great Britain and the United States, among the large non-life markets, showed above-average real growth rates in 1986. In Japan, non-life business rose considerably more strongly than life business for only the fourth time since 1970.

Switzerland again led all nations in premiums per capita at $1,746.50, with the United States second at $1,535.90.

Looking at the economic importance of the insurance industry in terms of its relationship to the gross domestic product (GDP)—used for the first time instead of the more usual gross national product (GNP)—the study showed the United States to be the world leader with premium income equal to 8.8 percent of GDP in 1986. Iceland was second, with 8.5 percent, followed by Great Britain at 8.3 percent and Japan at 8.2 percent. In each case the shares were considerably higher than those of the previous year.

The World's Leading Insurance Countries in 1986

(Premiums in millions of U.S. dollars)

Position	Country	Non-life premiums	Life premiums	Total premiums	Percentage of total world premiums
1	United States	$221,147	$149,925	$371,072	43.22%
2	Japan	50,789	119,194	169,983	19.80
3	Fed. Rep. of Germany	34,381	25,304	59,685	6.95
4	Great Britain	18,603	27,201	45,804	5.34
5	France	22,260	14,180	36,440	4.25
6	USSR	10,864	12,505	23,369	2.72
7	Canada	10,888	8,921	19,809	2.31
8	Italy	11,811	2,641	14,452	1.68
9	Netherlands	6,240	5,234	11,474	1.34
10	Switzerland	5,255	6,097	11,352	1.32

Source: Swiss Reinsurance Company, Sigma (May 1988)

World Insurance Premium Volume by Continent

(Premiums in millions of U.S. dollars)

	Total business		Non-life business		Life business	
	Premium income	World share (%)	Premium income	World share (%)	Premium income	World share (%)
North America	$390,881	45.53%	$232,035	51.85%	$158,846	38.65%
Europe	248,492	28.95	137,232	30.67	111,260	27.07
Asia	192,567	22.43	61,075	13.63	131,492	32.01
Oceania	9,762	1.14	6,536	1.46	3,226	0.78
Africa	8,639	1.01	4,071	0.92	4,578	1.11
Central and South America	8,149	0.94	6,551	1.47	1,598	0.38
World totals	$858,500	100.00	$447,500	100.0	$411,000	100.0

Source: Swiss Reinsurance Company, Sigma (May 1988)

Net Premiums Written by Line

Total premiums written by insurance companies in the United States for all types of insurance totaled more than $406 billion in 1987.

Net premiums written by property and casualty companies totaled more than $193.2 billion, up 9.5 percent from the 1986 total.

Approximate premium totals for principal property, liability and allied lines of insurance in 1986 and 1987 are tabulated below, along with the percentage of change in premium volume in each of those lines in 1987.

Net Premiums Written by Line, 1986–1987*

	1987	1986	% of Change
Auto Liability, Pvt. Passenger	$ 37,449,134,000	$ 32,972,920,000	+13.6%
Auto Liability, Commercial	11,755,444,000	11,108,002,000	+ 5.8
Total Auto Liability	49,204,578,000	44,080,922,000	+11.6
Auto Physical Damage, Pvt. Passenger	26,838,193,000	24,198,891,000	+10.9
Auto Physical Damage, Commercial	5,157,198,000	5,106,615,000	+ 1.0
Total Auto Physical Damage	31,995,391,000	29,305,506,000	+ 9.2
Total Automobile	81,199,969,000	73,386,428,000	+10.6
Medical Malpractice	4,004,185,000	3,491,905,000	+14.7
General Liability	20,873,777,000	19,364,658,000	+ 7.8
Total Liability (other than auto)	24,877,962,000	22,856,563,000	+ 8.8
Fire Insurance and Allied Lines**	7,656,406,000	6,933,221,000	+10.4
Homeowners Multiple Peril	16,653,011,000	15,222,027,000	+ 9.4
Farmowners Multiple Peril	889,752,000	828,365,000	+ 7.4
Commercial Multiple Peril	17,230,885,000	16,190,282,000	+ 6.4
Workers' Compensation	23,428,978,000	20,431,215,000	+14.7
Inland Marine	4,119,936,000	3,898,591,000	+ 5.7
Ocean Marine	1,354,533,000	1,224,729,000	+10.6
Surety and Fidelity	2,450,228,000	2,116,275,000	+15.8
Financial Guaranty	581,785,000	575,008,000	+ 1.2
Burglary and Theft	127,422,000	121,055,000	+ 5.3
Boiler and Machinery	595,545,000	531,319,000	+12.1
Glass	25,389,000	26,608,000	– 4.6
Aircraft	841,497,000	711,862,000	+18.2
Accident and Health	3,814,711,000	2,929,510,000	+30.2
Other Lines	7,397,770,000	8,569,012,000	–13.7
Total, All Lines	$193,245,779,000	$176,552,070,000	+ 9.5

*Net premiums written represent premium income retained by insurance companies, direct or through reinsurance, less payments made for business reinsured.

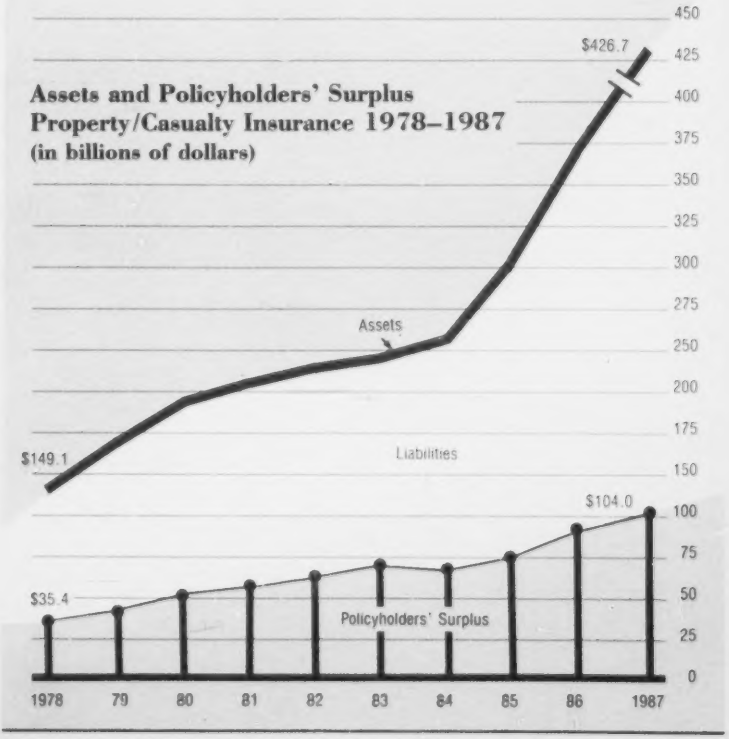
**Allied lines include crop-hail insurance premiums, reported separately on page 33, and earthquake insurance premiums.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Assets and Policyholders' Surplus

An idea of the strength and reliability of the property and casualty insurance business may be gained from a review of its assets and policyholders' surplus. The surplus is the sum remaining after liabilities are deducted from assets, and includes such sums as paid-in capital and special voluntary reserves. It provides additional financial protection to policyholders in the event of unexpected or catastrophic losses.

Traditionally, assets and policyholders' surplus have been reported in terms of aggregate totals, with the result that industrywide figures have included some duplications because of interownerships within company groups. However, consolidated totals, computed by eliminating interownerships, provide a more accurate picture of the industry's financial position. The graph below, based on the consolidated figures, shows that while both assets and the policyholders' surplus have been climbing steadily, liabilities have been increasing at a greater rate than surplus.



Source: Insurance Information Institute, based on data from Best's Aggregates & Averages.

As reflected by the table that follows, policyholders' surplus rose by some 10.3 percent from 1986 to 1987. From 1978 through 1987, policyholders' surplus climbed by 194 percent.

Assets, up 14.1 percent in 1987, have risen by about 186 percent since 1978. Most of those assets are invested in government, industrial and utility bonds, high grade stocks and to some extent in the real estate which the companies use for their own offices.

Consolidated Assets and Policyholders' Surplus 1978–1987

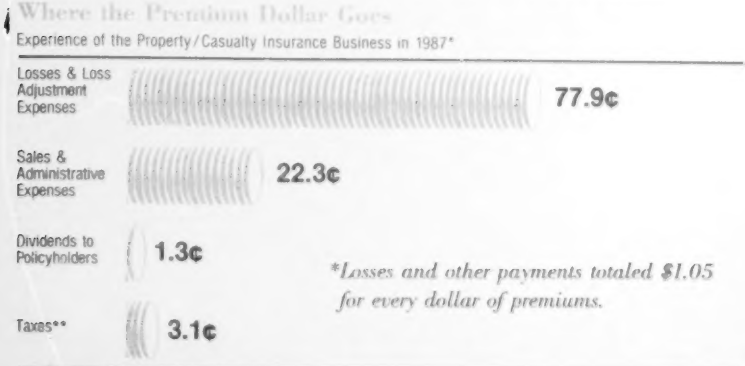
	Assets	Annual % change	Policyholders' surplus	Annual % change
1978	$149,097,273,952		$ 35,378,833,175	
1979	174,227,967,482	+16.9	42,456,100,830	+20.0
1980	197,660,794,250	+13.4	52,196,380,693	+22.9
1981	212,302,741,594	+ 7.4	53,804,788,612	+ 3.1
1982	231,692,712,528	+ 9.1	60,394,591,263	+12.2
1983	249,121,082,970	+ 7.5	65,605,727,424	+ 8.6
1984	264,734,721,825	+ 6.3	63,809,497,216	− 2.7
1985	311,364,665,175	+17.6	75,511,416,755	+18.3
1986	374,088,083,000	+20.1	94,288,390,000	+24.9
1987	426,710,597,000	+14.1	103,996,200,000	+10.3

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Where the Premium Dollar Goes

Losses and expenses involved in adjusting claims accounted for about 80 cents of every premium dollar taken in by property and casualty insurers in 1987. The overall cost of underwriting operations in 1987 amounted to the equivalent of $1.05 for every dollar in premiums, although the underwriting operations are intended to yield a reasonable profit.

Even in unprofitable years, some companies pay dividends to commercial policyholders that reflect their favorable loss experience, or dividends that reflect the total loss experience of certain lines of insurance.



**Excluding federal and foreign income and real estate taxes.

Source: A.M. Best Company, Inc.

Operating Results, Property/Casualty Insurers

Profits and losses of property and casualty insurance companies, particularly in recent years, have been subject to greater fluctuations than those of such other industries as banks, utilities and industrial companies. Separate analyses show that:

- The property/casualty business during the last quarter-century has recorded a net underwriting loss, after policyholders' dividends, of more than $115 billion. The industry has shown profits on underwriting operations in only five of the last 25 years (Table I).
- Investments of capital and surplus accounts, together with money set aside as loss reserves and unearned premium reserves, have generated income in those 25 years (Table II), permitting companies to continue their insurance operations despite the frequent underwriting deficits.

In 1987, income from investments rose by 9.3 percent to a record $23.9 billion and net underwriting losses declined by nearly 40 percent to $9.6 billion. As a result, the industry's combined net income before taxes jumped by some 138 percent to a record $14.3 billion.

I — Underwriting Results
Property/Casualty Insurance Business, 1963–1987

Year	Statutory underwriting gain/loss	Policyholder dividends	Net underwriting gain/loss
1963	$ −165,513,560	$ 342,918,102	$ −508,431,662
1964	−325,722,907	346,383,390	−672,106,297
1965	−352,262,883	357,266,631	−709,529,514
1966	386,926,845	406,801,627	−19,874,782
1967	233,618,824	448,577,105	−254,958,281
1968	−148,223,790	420,525,267	−568,749,057
1969	−529,899,198	518,055,044	−1,047,954,242
1970	77,776,245	503,557,640	−425,781,395
1971	1,381,800,492	555,628,714	826,171,778
1972	1,797,933,814	736,282,724	1,061,651,090
1973	791,751,321	785,697,875	6,063,446
1974	−1,878,371,405	766,526,721	−2,644,898,126
1975	−3,593,959,232	632,838,443	−4,226,797,675
1976	−1,558,551,291	630,100,279	−2,188,651,570
1977	1,926,315,435	814,512,866	1,111,802,569
1978	2,548,142,724	1,251,810,856	1,296,331,868
1979	23,605,762	1,324,377,487	−1,300,771,725
1980	−1,712,423,071	1,621,544,714	−3,333,967,785
1981	−4,463,887,604	1,823,748,383	−6,287,635,987
1982	−8,303,039,432	1,986,826,602	−10,289,866,034
1983	−11,087,953,340	2,234,116,716	−13,322,070,056
1984	−19,378,885,074	2,098,061,695	−21,476,946,769
1985	−22,597,291,605	2,196,246,934	−24,793,538,539
1986	−13,747,925,000	2,164,969,000	−15,912,894,000
1987	−7,078,243,000	2,546,258,000	−9,624,501,000

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

II — Investment Income, Property/Casualty Insurers*, 1963–1987

1963	$ 947,022,329	1976	$ 4,805,938,998
1964	1,031,931,888	1977	5,815,788,033
1965	1,131,625,619	1978	7,289,554,007
1966	1,217,979,544	1979	9,279,235,043
1967	1,351,764,283	1980	11,063,492,131
1968	1,511,509,149	1981	13,248,494,833
1969	1,711,806,360	1982	14,906,655,340
1970	2,005,080,766	1983	15,973,234,243
1971	2,421,495,267	1984	17,659,728,807
1972	2,799,737,168	1985	19,507,869,034
1973	3,325,344,488	1986	21,924,445,000
1974	3,832,669,322	1987	23,959,981,000
1975	4,150,203,882		

*Industrywide investment income, less investment expenses, before taxes. Figures for years prior to 1977 are aggregates and include some duplications because of interownerships within company groups. Totals from 1977 through 1987 have been consolidated to eliminate such duplications. Aggregate investment income figures for all years were used in the development of the second and third charts on page 24 in order to provide a consistent reflection of historical trends.

Source: A. M. Best Company, Inc., Best's Aggregates & Averages.

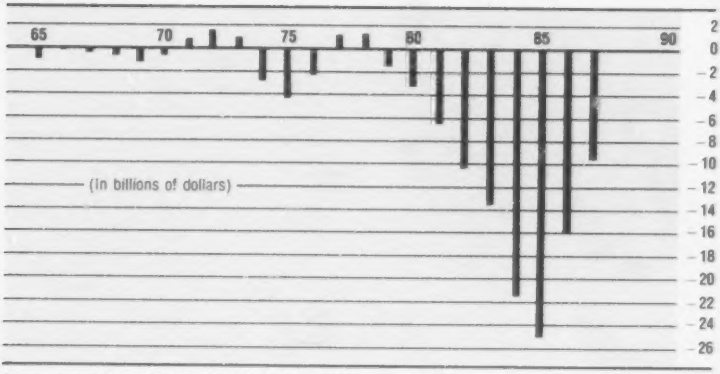
III — Combined Net Income* before Taxes, Property/Casualty Insurers, 1963–1987

1963	$ 438,590,667	1976	$ 2,617,287,428
1964	359,825,591	1977	6,927,590,602
1965	422,096,105	1978	8,585,885,875
1966	1,198,104,762	1979	7,978,463,318
1967	1,096,806,007	1980	7,729,524,346
1968	942,760,092	1981	6,960,858,846
1969	663,852,118	1982	4,616,789,306
1970	1,579,299,371	1983	2,651,164,187
1971	3,247,667,045	1984	−3,817,217,962
1972	3,861,388,258	1985	−5,285,669,505
1973	3,331,407,934	1986	6,011,551,000
1974	1,187,771,196	1987	14,335,480,000
1975	−76,593,793		

*Includes both underwriting gains or losses and investment income.

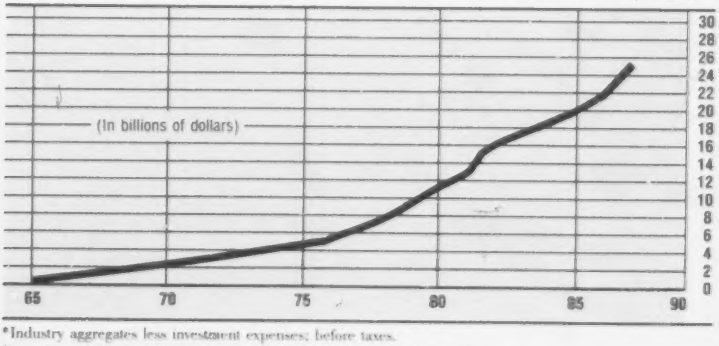
Source: A. M. Best Company, Inc., Best's Aggregates & Averages.

Underwriting Gains/Losses after Policyholder Dividends Property/Casualty Insurance Business, 1965–1987



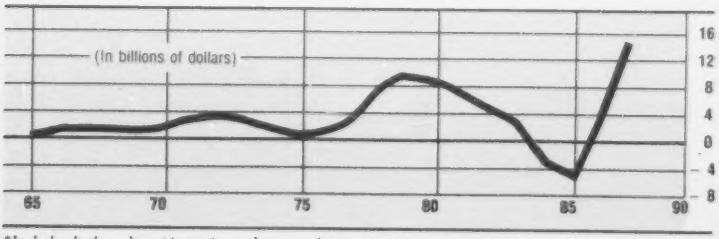
Source: Insurance Information Institute, based on data from Best's Aggregates & Averages

Investment Income, Property/Casualty Insurers*, 1965–1987



*Industry aggregates less investment expenses; before taxes.
Source: Insurance Information Institute, based on data from Best's Aggregates & Averages

Combined Net Income* before Taxes, Property/Casualty Insurers, 1965–1987



*Includes both underwriting gains or losses and aggregate investment income.
Source: Insurance Information Institute, based on data from Best's Aggregates & Averages

Profitability, Insurance and Other Industries

The highly competitive nature of the property/casualty insurance business generally has held its profitability over the years below the average of all U.S. industries, although in some years it has outperformed other industries, including those which are financially oriented.

The rate of return on net worth in the insurance industry went below 10 percent in 1982, and remained below 10 percent for four consecutive years before returning to a more normal level in 1986. Generally, the return on net worth of the property/casualty insurance business has been considerably less stable over the years than those recorded by other industries.

The table below compares the average annual rates of return of property/casualty insurers, diversified financial companies as a group, banks, utilities, transportation and all industries combined. The diversified financial group is composed largely of companies engaged in property and casualty insurance with or without life insurance and other financial services.

The insurance data are shown on two bases. The first figures show the rate of return on the statutory accounting basis. Statutory accounting is the accounting system that practically all insurance companies use in reporting to state regulators.

The second column on property/casualty insurance shows the rate of return on the basis of Generally Accepted Accounting Principles (GAAP). Most U.S. industries use GAAP accounting, and thus the data on this basis are more directly comparable to those of other industries. However, the figures are only estimates because many insurance companies, particularly mutuals, do not report their data on the GAAP basis.

Average Annual Rates of Return on Net Income after Taxes as Percent of Net Worth, Selected Industries

Year	Property/casualty insurance: Statutory accounting	Property/casualty insurance: GAAP accounting	Diversified financial	Banks	Utilities	Transportation	All* industries
1978	20.5%	18.1%	17.3%	12.9%	11.3%	13.3%	14.3%
1979	17.4	15.5	17.5	14.1	12.0	13.2	15.9
1980	14.7	13.1	14.0	13.4	11.7	11.3	14.4
1981	13.3	11.8	11.4	13.0	12.7	13.3	13.8
1982	9.3	8.8	10.0	12.0	12.5	7.9	10.9
1983	9.1	8.3	11.7	12.5	13.3	11.6	10.7
1984	1.7	1.8	9.3	12.6	13.4	13.6	13.5
1985	2.8	3.8	9.4	13.0	13.0	11.5	11.6
1986	13.9	13.1	15.9	12.8	13.3	7.7	11.0
1987	13.2	12.8	16.3	11.1	12.8	9.7	13.2
Average 1978-87	11.6%	10.7%	13.3%	12.7%	12.6%	11.3%	13.0%

*Median for Fortune 500 U.S. Industrial Corporations.

Sources: Property/casualty insurance data: GAAP accounting basis, Insurance Services Office. Statutory accounting rate of return calculated by Insurance Information Institute, based on A.M. Best data. All other industry figures for 1984 through 1987 are medians from Fortune Magazine data. The other industry data for the years 1978 through 1983 are industry averages from Fortune Magazine.

Investments of Property/Casualty Insurers

Investments of property/casualty insurance companies totaled $326.1 billion in 1987. Investments represented about 76.4 percent of total assets, which industrywide totaled more than $427 billion in 1987. Assets not considered investments include such items as office equipment and supplies.

Fixed income securities continue to dominate the investment portfolios, with special revenue bonds accounting for almost 29 percent of the industry's invested assets in 1987. Special revenue bonds include those issued by hospitals and colleges for expansion of facilities as well as those issued for public works programs, toll bridges and highways.

The last decade has seen significant fluctuations in the make up of insurers' investment portfolios. Overall, the portion of those portfolios invested in bonds jumped from 59.56 percent in 1973 to 64.29 percent in 1977, and to 77.64 percent in 1987. Holdings of common stocks dropped from 30.25 percent in 1977 to 17 percent in 1987.

Funds used by property/casualty companies for investments are generally derived from three major sources: policyholders' surplus, unearned premium reserves and loss reserves. The companies maintain the bulk of their funds in investments that can be sold readily—stocks and bonds, rather than general real estate—so that prompt payment of claims in the event of a catastrophe is assured.

Investments of Property/Casualty Insurers

	% in 1987	% in 1982	% in 1977
Bonds	**77.64**	**73.33**	**64.29**
U.S. Government	19.44	12.25	16.91
Other Government	.96	.85	.76
State, Municipal, etc.	13.12	14.32	20.41
Special Revenue, etc.	28.75	32.79	3.75
Railroad	.31	.29	.57
Utility	2.63	3.46	6.14
Miscellaneous	12.31	8.87	15.18
Parent, Subs., Affiliates	.13	.49	.57
Common Stock	**17.00**	**19.91**	**30.25**
Railroad	.11	.09	.04
Utility	1.27	1.54	2.15
Bank	—	.83	1.24
Insurance	—	.88	.46
Bank and Insurance*	1.49	—	—
Miscellaneous	8.81	10.94	11.84
Parent, Subs., Affiliates	5.30	5.62	14.52
Preferred Stock	**2.96**	**5.00**	**4.58**
Railroad	.02	.06	.02
Utility	1.32	3.35	3.55
Bank	—	.13	.04
Insurance	—	.09	.09
Bank and Insurance*	.31	—	—
Miscellaneous	1.04	1.30	.79
Parent, Subs., Affiliates	.27	.07	.09
Other	**2.40**	**1.76**	**.88**
Mortgages	1.59	.87	.45
Collateral Loans	.06	.07	.07
Other Invested Assets	.76	.82	.36

*Separate breakout of bank and insurance items no longer available as of 1983.
NOTE: Sums of individual items may not add up to totals because of the effects of rounding.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Net Premiums Written, 1978–1987

Total net premiums written by property and casualty companies have risen from about $81.7 billion in 1978 to more than $193.2 billion in 1987, with a 9.5 percent increase in 1987 alone. Accident and health premiums accounted for $3.8 billion of the total premiums written in 1987 by property and casualty insurers.

Total Net Premiums Written by Property and Casualty Insurance Companies, 1978–1987 ($000 omitted)

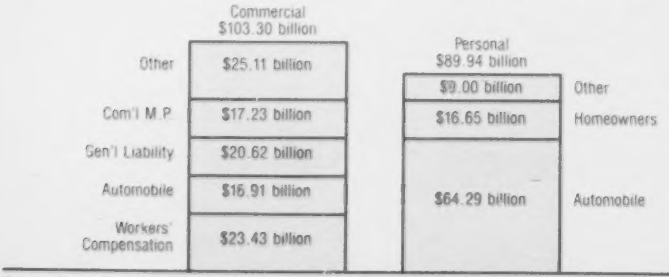
Year	Accident and health	All other	Total	Annual % change
1978	$2,627,884	$ 79,062,047	$ 81,689,931	
1979	3,179,250	86,943,369	90,122,619	+ 10.3
1980	3,290,764	92,388,785	95,568,749	+ 6.0
1981	3,585,113	95,690,462	99,275,575	+ 3.9
1982	4,306,651	99,661,570	103,968,221	+ 4.7
1983	4,347,760	104,635,048	108,982,808	+ 4.8
1984	3,836,695	114,329,616	118,166,311	+ 8.4
1985	3,205,359	140,981,061	144,186,420	+22.0
1986	2,929,510	173,622,560	176,552,070	+22.4
1987	3,814,711	189,431,068	193,245,779	+ 9.5

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Who Pays the Premium Dollar?

Purchases by individuals and their families accounted for about $89.9 billion, or 46.5 percent of the $193.2 billion in net premiums written by property and casualty insurers in the United States in 1987. Premiums paid by commercial purchasers amounted to about $103.3 billion with the heaviest concentrations in workers' compensation, automotive coverages, general liability and commercial multiple peril "package" policies. Estimates of the amount of premiums paid by commercial and individual insurance purchasers are shown below.

Purchases of Property and Casualty Insurance, 1987



Source: Insurance Information Institute, based on data provided by A.M. Best Company.

Automobile Insurance

In the face of continually climbing medical, legal and automobile repair costs, a vast majority of America's 162 million motorists are recognizing the prudence of purchasing automobile insurance to protect themselves against financial hardship resulting from motor vehicle accidents.

Auto insurance, in fact, is by far the largest single classification of the property/casualty insurance business. The premium volume of $81.2 billion recorded in 1987 was almost double that of 1981, only six years earlier. Auto insurance in 1987 accounted for about 42 percent of the total premium volume written by property/casualty insurers.

Automobile liability insurance comprised more than 60 percent of all auto insurance purchases in 1987. The possession of auto liability insurance has become a virtual necessity for most motorists, both for their own financial protection and to enable them to meet the requirements of financial responsibility laws and/or compulsory auto insurance laws of their states (see page 110).

Auto insurance is purchased primarily by individuals or family groups. The premium volume for the commercial lines rose only moderately in 1987 after sharp increases in 1985 and 1986. In 1987, industrial and other commercial buyers accounted for 20.8 percent of all auto insurance purchases, down from 22.1 percent in 1986.

While some companies recorded at least modest profits, the industry as a whole again suffered an underwriting deficit on the auto insurance lines in 1987. Overall, the auto insurance business has been in the red in each of the last nine years, although the physical damage lines showed a profit in each of the last three years, as is reflected by the table on page 29.

Automobile Liability Insurance, 1978–1987

	Private passenger			Commercial		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$16,047,755,000		98.3	$ 4,335,232,000		99.3
1979	17,385,444,000	+ 8.3	100.8	4,716,903,000	+ 8.8	104.4
1980	18,590,373,000	+ 6.9	102.6	4,728,913,000	+ 0.3	109.0
1981	19,649,912,000	+ 5.7	108.9	4,745,262,000	+ 0.3	117.5
1982	21,487,468,000	+ 9.4	110.1	4,738,978,000	− 0.1	125.6
1983	23,343,939,000	+ 8.6	111.0	4,736,128,000	− 0.1	132.0
1984	24,809,382,000	+ 6.3	112.8	5,407,281,000	+14.2	142.4
1985	28,243,882,000	+13.8	116.9	7,842,789,000	+45.0	126.3
1986	32,972,920,000	+16.7	117.9	11,108,002,000	+41.6	111.6
1987	37,449,134,000	+13.6	116.1	11,755,444,000	+ 5.8	107.1

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Automobile Physical Damage Insurance, 1978–1987

Year	Private passenger			Commercial		
	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$10,540,718,000		95.9	$ 2,294,195,000		89.5
1979	11,909,408,000	+13.0	100.3	2,628,293,000	+14.6	93.6
1980	13,086,150,000	+ 9.9	96.6	2,746,853,000	+ 4.5	95.9
1981	14,033,870,000	+ 7.2	98.6	2,713,919,000	− 1.2	99.8
1982	15,292,070,000	+ 9.0	101.4	2,713,417,000	0.0	106.0
1983	16,974,304,000	+11.0	96.3	2,773,199,000	+ 2.2	105.9
1984	18,497,769,000	+ 9.0	100.6	3,268,035,000	+17.8	110.9
1985	21,180,583,000	+14.5	98.9	4,066,138,000	+24.4	97.1
1986	24,198,891,000	+14.3	93.6	5,106,615,000	+25.6	82.1
1987	26,838,193,000	+10.9	89.7	5,157,198,000	+ 1.0	79.4

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Average Auto Insurance Premiums by State

Average auto insurance premiums for private passenger cars are higher in New Jersey than in any other state, according to a 1986 study by the A.M. Best Company, Inc. (Best's). In both New Jersey and Alaska, the only states with average annual premiums of more than $600 in 1986, the cost of auto insurance was nearly 150 percent higher than in Iowa, the least expensive state.

Best's noted that state-by-state comparisons can be skewed by factors such as different requirements for minimum limits to be carried and the lack of mandatory auto insurance in 16 states in 1986. Of the top 20 states in the 1986 rankings, all but one had compulsory auto insurance in effect that year. The average premium results were calculated by dividing the number of registered cars into the total direct premiums written in each state.

The study report observed that for several years, at least two ongoing programs have been conducted to reduce auto insurance costs: tort reform and research to produce safety features to decrease the severity of injuries from collisions and reduce the amount of damage to vehicles. Best's commented that the programs have had little or no impact on auto insurance rates during the last five years.

For individual car owners, premiums vary widely from the statewide averages depending on a number of factors. They include the number of cars insured under a policy; the age, sex, driving record and place of residence of the driver; the type, age and use of the car, and the types and amounts of coverage purchased.

Average annual premiums by state in 1985 and 1986, along with the state-by-state ranking in each year and the percent increase in average premiums from 1985 to 1986 and from 1982 to 1986, are listed in the table on the following page.

Average Automobile Insurance Premiums by State*, 1985–1986

(Ranked by 1986 average premium)

State	1986 Rank	1986 Average premium	1985 Rank	1985 Average premium	Percent increase in average premiums 1985–1986	1982–1986
New Jersey	1	$603.55	2	$580.12	4.0%	32.4%
Alaska	2	602.45	1	595.44	1.2	70.1
California	3	568.20	4	503.65	12.8	58.6
Massachusetts	4	555.55	3	521.40	6.5	55.5
Arizona	5	553.84	7	471.38	17.5	83.7
Nevada	6	549.55	5	498.75	10.2	42.9
New York	7	522.06	6	485.07	7.6	35.7
Louisiana	8	514.97	9	443.24	16.2	39.7
Pennsylvania	9	512.09	8	465.03	10.1	43.1
Maryland	10	506.34	11	423.53	19.6	59.0
Michigan	11	481.07	16	404.63	18.9	56.7
Rhode Island	12	476.60	15	405.93	17.4	58.3
Connecticut	13	466.09	13	412.52	13.0	52.4
Dist. of Col.	14	463.13	19	385.27	20.2	75.4
Delaware	15	462.49	14	408.04	13.3	56.0
West Virginia	16	454.65	10	426.56	6.6	31.9
Hawaii	17	453.60	12	417.59	8.6	24.3
Georgia	18	449.95	22	372.06	20.9	75.5
South Carolina	19	449.74	17	398.86	12.8	46.9
Colorado	20	444.11	21	379.16	17.1	54.7
Arkansas	21	433.75	18	392.27	10.6	66.1
Texas	22	425.96	20	383.76	11.0	37.3
Illinois	23	418.67	25	356.00	17.6	43.6
Minnesota	24	416.98	34	318.29	31.0	46.0
Missouri	25	403.49	26	354.36	13.9	53.1
Utah	26	396.78	31	329.96	20.3	58.1
Oregon	27	396.37	28	349.68	13.4	36.1
Washington	28	393.86	27	351.53	12.0	39.3
Florida	29	386.93	29	344.98	12.2	46.5
Wyoming	30	383.57	40	307.51	24.7	45.1
Virginia	31	381.02	32	325.15	17.2	50.2
New Mexico	32	378.17	23	368.43	2.6	64.5
Montana	33	372.96	24	360.36	3.5	47.8
Wisconsin	34	372.76	39	308.85	20.7	62.3
Kentucky	35	369.37	33	321.83	14.8	63.3
Oklahoma	36	368.85	30	342.47	7.7	46.6
Vermont	37	363.97	38	310.66	17.2	39.2
North Carolina	38	362.36	35	315.75	14.8	72.0
Kansas	39	345.19	36	312.50	10.5	29.8
Idaho	40	344.30	41	300.43	14.6	48.9
Indiana	41	337.60	42	298.08	13.3	49.0
Maine	42	332.83	43	296.71	12.2	36.7
New Hampshire	43	330.47	37	312.34	5.8	26.1
Ohio	44	327.01	45	279.39	17.0	44.5
Nebraska	45	323.98	44	288.02	12.5	31.0
North Dakota	46	307.13	46	278.07	10.4	27.3
Mississippi	47	297.25	47	271.02	9.7	37.6
Tennessee	48	292.49	48	261.15	12.0	48.1
Alabama	49	278.46	49	260.63	6.8	46.1
South Dakota	50	255.77	50	231.24	10.6	27.2
Iowa	51	243.95	51	214.84	13.6	6.5
National Average		$440.58		$390.04	13.0	47.7

* Average annual premiums were calculated by dividing the number of registered automobiles in each state into the total direct premiums (private passenger auto liability, physical damage and no-fault) written in that state. The A.M. Best Company noted that because the government-provided count of registered automobiles includes commercial vehicles (but not trucks or buses) as well as cars that are registered but not insured, the average premium figures are distorted on the low side. State-by-state comparisons can be skewed by such factors as different requirements for minimum limits to be carried and the lack of mandatory insurance in some states. Nonetheless, the annual study has proved to be useful as a guide to changes in the private passenger lines, especially for annual changes within any one state.

Source: A.M. Best Company, Inc., Best's Insurance Management Reports.

Fire Insurance and Allied Lines

Although fire insurance coverage is included in the popular homeowners, farmowners and commercial multiple peril policies, premium volume from fire insurance policies increased by some 12.8 percent in 1987. It was the fourth consecutive annual increase after four years of diminishing premium volumes.

The premium volume for allied lines increased by about 5.9 percent in 1987 after increases in the 20 percent range in each of the preceding two years. Allied lines includes crop-hail insurance as well as coverage against losses from windstorms, earthquakes, riots and explosions and other perils.

Both fire insurance and allied lines showed profits in 1987 for the second consecutive year.

Fire Insurance and Allied Lines, 1978–1987

	Fire insurance			Allied lines**		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$3,223,389,000		88.8	$ 1,451,979,000		89.9
1979	3,246,495,000	+ 0.7	94.3	1,534,155,000	+ 5.7	100.7
1980	3,209,955,000	– 1.1	97.7	1,573,940,000	+ 2.6	103.8
1981	3,192,516,000	– 0.5	97.6	1,624,487,000	+ 3.2	94.6
1982	3,153,523,000	– 1.2	97.4	1,682,885,000	+ 3.6	99.2
1983	3,011,743,000	– 4.5	104.1	1,596,561,000	– 5.1	108.3
1984	3,198,402,000	+ 6.2	111.5	1,654,243,000	+ 3.6	103.3
1985	4,218,247,000	+31.9	95.4	1,955,122,000	+18.2	101.4
1986	4,574,210,000	+ 8.4	90.9	2,359,011,000	+20.7	80.4
1987	5,157,915,000	+12.8	86.8	2,498,491,000	+ 5.9	79.6

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

**Covers a wide variety of perils, including windstorm, riot, explosion, sprinkler leakage, water damage and earthquakes; also includes crop-hail premiums.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Multiple Peril Insurance

Until the mid-1950s, property owners had to buy a variety of insurance coverages separately in order to obtain full coverage against such perils as fire, windstorm, burglary and theft, and to protect themselves against liability claims. While most property owners purchased fire and extended coverage insurance, many failed to take advantage of other available forms of coverage. It was to help people more adequately safeguard their resources that insurers developed the homeowners, commercial and other "package" policies offering adequate coverage against a variety of perils at a cost lower than the combined costs of the individual coverages.

The success of the package policies has had a pronounced effect on the amount of insurance written on such separate lines as fire and extended coverage, liability (other than auto), burglary and theft, inland marine and glass because of the inclusion of such coverages in the various multiple peril policies.

In recent years, growth in the homeowners and farmowners package policies has leveled out and is now at about the rate of growth in the overall economy.

For all three of the multiple peril lines, underwriting results were generally favorable in 1987.

Premiums written and combined ratios in the homeowners and commercial multiple peril lines over the last 10 years are shown in the table below. Similar information relating to the farmowners line is contained in the table at the top of the next page.

Homeowners/Commercial Multiple Peril, 1978–1987

	Homeowners			Commercial		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$ 7,792,293,000		92.0	$ 5,829,795,000		84.1
1979	8,791,661,000	+12.8	98.6	6,666,822,000	+14.4	92.5
1980	9,820,753,000	+11.7	104.9	6,885,159,000	+ 3.3	98.0
1981	10,779,626,000	+ 9.8	101.4	6,869,978,000	– 0.2	106.0
1982	11,746,998,000	+ 9.0	103.5	7,009,385,000	+ 2.0	115.6
1983	12,511,830,000	+ 6.5	103.2	7,292,720,000	+ 4.0	122.6
1984	13,212,762,000	+ 5.6	106.1	8,286,962,000	+13.6	134.5
1985	14,066,391,000	+ 6.5	111.3	12,096,578,000	+46.0	121.1
1986	15,222,027,000	+ 8.2	103.1	16,190,282,000	+33.8	96.0
1987	16,653,011,000	+ 9.4	96.2	17,230,885,000	+ 6.4	90.7

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Farmowners Multiple Peril, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$434,478,000		96.1
1979	518,569,000	+19.4	93.2
1980	554,759,000	+ 7.0	112.0
1981	619,889,000	+11.7	111.2
1982	668,991,000	+ 7.9	120.0
1983	691,553,000	+ 3.4	111.4
1984	729,153,000	+ 5.4	119.4
1985	769,915,000	+ 5.6	112.3
1986	828,365,000	+ 7.6	108.6
1987	889,752,000	+ 7.4	95.7

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Crop-Hail Insurance

Hail storms, which occur most frequently in the Midwest, can destroy millions of dollars worth of growing crops. Crop-hail insurance provides farmers with financial protection against damage resulting from hail or other perils.

A drop in the crop-hail premium volume in 1987 was considerably less than the sharp declines of the previous two years resulting from the federal government's Conservation Reserve Program. That program effectively removed millions of acres of cropland from production.

Loss ratios for crop-hail were surprisingly high in 1987 despite a mild spring and early summer. The worsening of the countrywide loss ratio was primarily the result of a series of late season storms in Arizona, Colorado, Iowa, North Dakota and Texas.

The private industry wrote an additional $305 million in multiple peril crop insurance in 1987, up slightly from the $303.6 million written in 1986. Private insurers have offered this "all-risk" coverage, which is reinsured by the Federal Crop Insurance Corporation (FCIC), since 1981. The FCIC wrote $59 million of this coverage directly in 1987. The industry and the FCIC combined experienced a loss ratio of 89 percent in 1987.

Crop-Hail Insurance, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$349,782,000		111.1
1979	394,666,000	+12.8	92.4
1980	415,368,000	+ 5.2	133.3
1981	502,503,000	+21.0	102.1
1982	531,570,000	+ 5.8	82.4
1983	443,838,000	−16.5	83.9
1984	508,744,000	+14.6	73.6
1985	447,065,000	−12.1	91.7
1986	379,106,000	−15.2	98.7
1987	351,226,000	− 7.5	105.6

*Combined loss and expense ratios are estimates based on expenses reported by members and subscribers of the Crop-Hail Insurance Actuarial Association.

Source: Crop-Hail Insurance Actuarial Association.

General Liability Insurance

General liability insurance provides protection against claims arising from injuries to others, or damage to property of others, and for which the insured person is held responsible because of ownership of property, a manufacturing or contracting operation, the sale or distribution of products, the operation of elevators and the like, as well as professional services. The general liability line does not cover injuries or damages growing out of automobile accidents, which must be insured separately.

Sharp increases in the number of lawsuits and the average size of claims in recent years, particularly against doctors and other professional people and product manufacturers, have helped to generate a continuing need for the financial protection afforded by general liability insurance. Although liability coverage is included in both commercial and homeowners "package" policies, the premium volume for the general liability line alone rose steadily for many years. Underwriting profits in 1977 and 1978, however, created a competitive market which brought down the cost of general liability insurance. This development, in turn, contributed to a slowdown in the premium growth rate in 1978 and 1979 and to a decline in premium volume in each of the next three years. However, mounting losses touched off a need for increases in premium rate levels, which in turn have contributed to increases in the premium volume in each of the last five years.

Medical Malpractice: Medical malpractice insurance premiums were included in the general liability totals through 1974, but have been reported separately since that time. A proliferation of insurance claims and lawsuits against hospitals, doctors and other medical practitioners has not only generated a heavy demand for medical malpractice insurance in recent years, but has contributed to severe underwriting losses over the last several years.

General Liability/Medical Malpractice, 1978–1987

	General liability			Medical malpractice		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$6,490,064,000		96.9	$ 1,215,789,000		102.6
1979	6,612,474,000	+ 1.9	97.6	1,204,326,000	– 0.9	112.6
1980	6,414,678,000	– 3.0	106.6	1,275,603,000	+ 5.9	128.2
1981	6,046,292,000	– 5.7	115.3	1,338,299,000	+ 4.9	135.7
1982	5,668,459,000	– 6.2	128.6	1,490,270,000	+11.4	149.3
1983	5,679,295,000	+ 0.2	137.6	1,568,001,000	+ 5.2	150.1
1984	6,479,268,000	+14.1	151.1	1,774,754,000	+13.2	161.1
1985	11,544,152,000	+78.2	145.3	2,769,230,000	+56.0	166.0
1986	19,364,658,000	+67.7	116.5	3,491,905,000	+26.1	138.6
1987	20,873,777,000	+ 7.8	110.7	4,004,185,000	+14.7	121.7

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Workers' Compensation Insurance

Workers' compensation insurance is designed to provide for the cost of medical care, rehabilitation and lost wages for injured employees and death benefits for the dependents of persons killed in work-related accidents. The scope of this coverage has broadened considerably in recent years, in large measure because of improvements in state laws to meet performance standards recommended in 1972 by the National Commission on State Workmen's Compensation Laws. Many states have taken action not only to expand benefits but also to make the coverage applicable to classifications of employees not previously covered.

About nine out of 10 people in the nation's work force have the protection of workers' compensation insurance, which today is compulsory for nearly all employees in all but three states, New Jersey, South Carolina and Texas. Even in those states, however, most businesses provide the coverage in order to limit their risk of negligence suits.

With the recession of recent years and a high rate of unemployment held to be the main contributing factors, premium growth was uncharacteristically slow in the early '80s before rising by 12.8 percent in 1985, 19.8 percent in 1986 and 14.7 percent in 1987.

Among the incentives offered to employers by workers' compensation insurers to develop and implement effective safety programs is the practice of returning premium dollars at the end of each year to companies with a favorable loss experience. Workers' compensation insurers account for a large part of the dividends returned to policyholders by property/casualty insurers each year with the result that the line has been generally unprofitable for many years. In 1987 alone, dividends to policyholders amounted to about 6.4 percent of premiums earned by workers' compensation insurers.

Workers' Compensation Insurance 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$11,300,144,000		99.4
1979	13,164,144,000	+16.5	96.4
1980	14,238,247,000	+ 8.2	93.4
1981	14,616,297,000	+ 2.7	94.1
1982	13,945,256,000	− 4.6	94.0
1983	14,005,293,000	+ 0.4	101.9
1984	15,107,292,000	+ 7.9	112.0
1985	17,047,548,000	+12.8	109.5
1986	20,431,215,000	+19.8	113.5
1987	23,428,978,000	+14.7	111.2

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Surety and Fidelity

Surety bonds, including contract, license and permit, court and fiduciary bonds, provide for monetary compensation should there be a failure to perform certain acts—such as the proper fulfillment of a construction contract—within a stated period. Surety bond premiums declined sharply in 1986, partly because of the separation of the surety and financial guaranty lines for the first time, but rose by 9.6 percent in 1987.

Fidelity bonds, a suretyship product, are a form of protection against losses caused by dishonest or fraudulent acts of employees. In 1987, the premium volume exceeded the billion dollar mark for the first time.

Surety and Fidelity, 1978–1987

Year	Surety			Fidelity		
	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1978	$ 759,480,000		96.9	$ 316,703,000		105.4
1979	805,142,000	+ 6.0	90.8	350,046,000	+10.5	87.9
1980	887,577,000	+10.2	105.7	360,063,000	+ 2.9	93.2
1981	970,498,000	+ 9.3	86.1	380,749,000	+ 5.7	98.9
1982	1,094,117,000	+12.7	89.4	360,041,000	– 5.4	113.5
1983	1,272,198,000	+16.3	87.5	376,651,000	+ 4.6	122.3
1984	1,564,934,000	+23.0	95.6	431,719,000	+14.6	118.4
1985	2,264,435,000	+44.7	112.5	588,245,000	+36.3	94.9
1986	1,315,263,000	–41.9	125.4	801,012,000	+36.2	75.8
1987	1,441,620,000	+ 9.6	121.0	1,008,608,000	+25.9	71.4

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Burglary and Theft Insurance

The burglary lines include coverages for loss of property (including money and securities) due to burglary, robbery and larceny, and loss of money and securities due to destruction or disappearance. Much of this coverage is now included in package policies. Premium volume rose by 5.3 percent in 1987.

Burglary and Theft, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$132,855,000		70.5
1979	140,071,000	+ 5.4	78.1
1980	135,727,000	– 3.1	88.8
1981	127,534,000	– 6.0	92.9
1982	114,905,000	– 9.9	94.5
1983	105,825,000	– 7.9	87.0
1984	109,005,000	+ 3.0	80.0
1985	122,259,000	+12.2	73.1
1986	121,055,000	– 1.0	69.1
1987	127,422,000	+ 5.3	64.8

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Boiler and Machinery Insurance

This specialized line covers a wide variety of power-producing equipment. Insurance companies place considerable emphasis on inspection and engineering techniques in the interest of safety. The growth of automation in industrial processes and the increased size and sophistication of production facilities have heightened the need for loss-preventive services. The boiler and machinery premium volume increased by 12.1 percent in 1987 after a decline of more than 14 percent in the preceding year.

Boiler and Machinery, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$255,873,000		84.5
1979	282,795,000	+10.5	87.5
1980	292,624,000	+ 3.5	90.2
1981	298,320,000	+ 1.9	92.4
1982	292,845,000	− 1.8	100.3
1983	355,861,000	+21.5	107.1
1984	439,108,000	+23.4	117.8
1985	618,358,000	+40.8	79.8
1986	531,319,000	−14.1	93.0
1987	595,545,000	+12.1	84.6

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Glass Insurance

Architectural demands, merchandising trends and decorative constructional functions have contributed to an ever-increasing use of glass and a continuing need for glass insurance. With glass coverage included in many of the popular multiple peril package policies, premium volume for glass insurance generally has been on the decline for several years.

Glass, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$34,951,000		99.3
1979	33,457,000	−4.3	103.3
1980	32,248,000	−3.6	110.3
1981	31,085,000	−3.6	108.8
1982	28,814,000	−7.3	105.2
1983	27,092,000	−6.0	105.3
1984	27,842,000	+2.8	87.6
1985	25,492,000	−8.4	83.9
1986	26,608,000	+4.4	68.0
1987	25,389,000	−4.6	85.2

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Inland Marine Insurance

Inland marine insurance, originally developed to cover goods in transit by other than ocean vessels, today covers such instruments of transportation as bridges and tunnels as well as personal effects, personal property, jewelry, furs, fine arts and many other properties.

Inland marine premium volume continues to increase each year despite the diversion of personal property coverages to homeowners and other package forms.

Inland Marine, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$1,867,189,000		86.5
1979	2,061,306,000	+10.4	94.9
1980	2,291,294,000	+11.2	102.1
1981	2,427,692,000	+ 6.0	102.1
1982	2,509,999,000	+ 3.4	102.1
1983	2,649,461,000	+ 5.6	102.8
1984	3,017,099,000	+13.9	106.0
1985	3,672,227,000	+21.7	95.8
1986	3,898,591,000	+ 6.2	81.6
1987	4,119,936,000	+ 5.7	81.2

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Ocean Marine Insurance

The American ocean marine hull and cargo market has gradually expanded in volume and capacity. Its growth reflects not only greater international trade but the increase in ownership of pleasure craft along the coastal and inland waterways. Premium volume in the ocean marine insurance line has been increasing moderately for several years.

Ocean Marine, 1978–1987

Year	Premiums written	Annual % change	Combined ratio*
1978	$1,000,203,000		100.3
1979	1,008,816,000	+ 0.9	108.5
1980	1,064,798,000	+ 5.5	115.0
1981	1,126,766,000	+ 5.8	110.3
1982	1,100,596,000	− 2.3	112.9
1983	1,096,231,000	− 0.4	112.6
1984	1,155,131,000	+ 5.4	112.7
1985	1,176,528,000	+ 1.9	104.4
1986	1,224,729,000	+ 4.1	100.6
1987	1,354,533,000	+10.6	99.8

*Before dividends to policyholders. The combined ratio measures the relationship between premiums and insurance companies' expenses and claim losses. A combined ratio above 100 means that for every $100 paid in premiums, more than $100 went to expenses and claim losses.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Nuclear Insurance

Insurance against losses resulting from nuclear accidents is provided by three insurance company groups: the American Nuclear Insurers, the Mutual Atomic Energy Liability Underwriters and individual members of the MAERP Reinsurance Association. Coverage against nuclear losses through the pools has been available since 1957.

Together the nuclear pools make available to any nuclear facility:

- Up to $160 million of liability coverage (bodily injury and property damage combined) and $30 million of contingent liability. These coverages provide financial protection for the general public.
- Up to $750 million of insurance to cover damage to the property of nuclear facility operators on an "all-risk" basis.
- Up to $100 million of coverage to decontaminate on-site property adjacent to a reactor which experiences a serious nuclear accident.

The nuclear pools' premiums have risen over the years along with the growth of the nuclear industry. An estimated $61.8 million in liability premiums in 1987 represented an increase of about 11.5 percent over the 1986 total. Property premiums increased by 14.2 percent in 1987 after a slight decline in the previous year.

Under the pools' Industry Credit Rating Plan, approximately 70 percent of each year's liability premium income is reserved for potential claims or to be returned to insureds based upon good experience over a 10-year period. In 1987, more than $6.75 million was returned to those insureds having policies in effect in 1977. This brings to more than $44.8 million the total amount refunded since 1967.

The following table shows the premium income since 1957 for the nuclear insurance domestic liability and property insurance pools.

Nuclear Insurance Premiums, 1957–1987

Year	Liability premium	% Annual change, 1977–1987	Property premium	% Annual change, 1977–1987
1957-1975	$74,006,812*		$117,094,889*	
1976	15,351,874		25,520,449	
1977	17,532,802	+14.2	26,773,664	+12.7
1978	19,184,000	+ 9.4	30,702,774	+ 6.7
1979	20,316,309	+ 5.9	40,199,178	+30.9
1980	23,002,157	+13.2	61,353,439	+52.6
1981	27,521,486	+19.6	74,263,992	+20.0
1982	30,255,952	+ 9.9	98,826,043	+33.1
1983	32,389,262	+ 7.1	111,680,839	+13.0
1984	35,543,147	+29.9	131,798,114	+18.0
1985	42,053,813	+18.3	143,880,947	+ 9.2
1986	55,401,909	+31.7	140,882,556	- 2.1
1987	61,800,000**	+11.5	160,906,144	+14.2

*Represents gross written premium from inception to Nov. 30, 1975.
**Estimated.
Source: American Nuclear Insurers.

Direct Written Premiums by State

Direct premiums written by property and casualty insurance companies in 1987 totaled about $199.5 billion, an increase of 8 percent over the 1986 total. Data provided by A.M. Best Company (representing about 98 percent of the nation's total insurance market) provided the basis for the tabulations that follow of premiums by state and by line.

The direct written premium total included $196,325,312,000 in premiums for the various property and casualty coverages and $3,152,827,000 in accident and health insurance premiums.

The totals differ slightly from the premium totals shown elsewhere in Insurance Facts because the tabulations presented here are based on direct premiums written and those used elsewhere are based on net premiums written. Direct written premiums are the amounts actually paid by the policyholders. Net written premiums reflect additional exchanges of premiums among insurance companies which contract, through a process known as reinsurance, to absorb specified portions of each other's losses.

Direct Written Premiums by State, 1987 (000 omitted)

State	All lines total	State	All lines total
Alabama	$ 2,596,553	Missouri	$ 3,890,857
Alaska	622,144	Montana	552,437
Arizona	2,666,487	Nebraska	1,117,993
Arkansas	1,506,961	Nevada	826,337
California	28,716,912	New Hampshire	1,103,159
Colorado	2,545,997	New Jersey	8,930,318
Connecticut	3,981,176	New Mexico	948,151
Delaware	617,343	New York	17,047,401
District of Columbia	710,662	North Carolina	3,791,336
Florida	10,114,380	North Dakota	427,203
Georgia	5,024,804	Ohio	6,680,921
Hawaii	988,689	Oklahoma	2,126,549
Idaho	620,237	Oregon	2,064,783
Illinois	9,577,137	Pennsylvania	10,149,393
Indiana	3,458,920	Rhode Island	944,976
Iowa	1,827,819	South Carolina	2,208,953
Kansas	1,822,168	South Dakota	433,369
Kentucky	2,158,147	Tennessee	3,207,038
Louisiana	3,263,098	Texas	12,967,251
Maine	972,107	Utah	878,090
Maryland	4,024,588	Vermont	478,305
Massachusetts	6,316,505	Virginia	4,166,127
Michigan	7,720,598	Washington	3,009,649
Minnesota	3,646,168	West Virginia	913,996
Mississippi	1,529,852	Wisconsin	3,295,856
		Wyoming	288,240
		Countrywide	$199,478,139

Source: A.M. Best Company, Inc., Best's Executive Data Service.

Direct Written Premiums by Line, 1987 (000 omitted)

State	Pvt. pass. automobile liability	Commercial automobile liability	Pvt. pass. automobile phys. dmg.	Commercial automobile phys. dmg.	Homeowners	Farmowners
Alabama	$ 362,830	$ 172,313	$ 446,933	$ 60,348	$ 287,901	$ 23,268
Alaska	77,451	26,091	53,713	7,634	39,529	—
Arizona	666,115	163,084	356,017	62,161	220,147	4,794
Arkansas	244,691	118,988	214,486	49,818	161,940	6,076
California	6,071,104	1,491,732	3,633,943	591,341	2,149,411	72,405
Colorado	576,700	137,786	385,492	69,784	262,355	16,583
Connecticut	780,939	245,899	486,933	97,946	316,708	1,158
Delaware	127,704	45,547	75,486	17,204	41,819	1,967
Dist. of Col.	86,439	26,244	56,872	8,383	35,986	—
Florida	2,344,836	762,260	1,319,107	271,563	819,414	6,198
Georgia	1,049,085	358,019	746,489	135,318	409,408	27,514
Hawaii	214,419	59,659	103,215	17,661	52,661	15
Idaho	113,529	36,501	85,080	20,926	49,398	15,245
Illinois	1,431,829	517,547	1,281,637	231,104	703,510	58,661
Indiana	621,134	253,767	534,696	147,099	362,297	51,939
Iowa	262,901	124,226	229,723	65,606	137,048	26,992
Kansas	288,343	110,906	263,340	67,370	182,835	36,743
Kentucky	411,862	121,347	321,404	78,644	191,764	44,756
Louisiana	641,071	253,264	381,602	62,894	355,517	1,575
Maine	125,680	64,756	124,016	33,629	88,779	1,556
Maryland	1,099,115	288,969	517,692	104,817	270,643	8,218
Massachusetts	1,240,909	372,267	975,290	202,714	583,919	898
Michigan	1,195,345	348,703	1,575,199	235,229	660,331	50,590
Minnesota	723,592	214,191	397,686	88,987	315,460	23,335
Mississippi	213,222	112,916	229,601	62,192	210,914	935
Missouri	646,222	221,754	579,912	109,136	350,004	41,003
Montana	98,606	46,893	67,810	24,422	47,703	14,969
Nebraska	157,894	83,534	141,262	45,235	90,182	25,323
Nevada	228,409	52,954	119,317	20,322	76,455	2,181
New Hampshire	176,263	70,176	172,054	40,279	100,527	353
New Jersey	1,942,429	776,606	1,172,916	244,765	637,038	1,199
New Mexico	181,472	55,875	147,503	29,600	86,352	5,912
New York	2,855,524	1,118,610	1,986,209	360,043	1,331,780	13,717
North Carolina	790,318	278,638	626,305	117,267	362,400	18,942
North Dakota	65,129	25,635	59,494	16,722	31,172	15,896
Ohio	1,366,231	423,857	1,081,040	223,689	625,349	34,502
Oklahoma	371,757	127,292	340,048	71,409	292,326	38,007
Oregon	453,104	130,435	260,175	61,294	149,726	19,080
Pennsylvania	2,312,841	708,810	1,183,160	260,428	699,228	22,017
Rhode Island	159,257	56,366	137,782	23,526	87,146	48
South Carolina	549,876	139,312	364,048	51,982	210,515	1,843
South Dakota	62,431	33,181	57,735	19,323	26,478	14,492
Tennessee	509,728	234,260	534,501	101,470	314,328	32,086
Texas	2,010,230	689,662	1,907,777	302,734	1,379,327	40,649
Utah	178,390	57,718	143,048	28,220	76,923	2,735
Vermont	64,509	30,592	68,425	17,444	47,942	6,323
Virginia	956,224	291,207	607,625	104,612	312,485	14,324
Washington	732,942	196,275	422,287	84,291	287,648	21,589
West Virginia	221,787	57,309	184,946	33,944	101,035	3,656
Wisconsin	550,430	195,446	418,483	105,936	235,325	49,247
Wyoming	45,300	18,895	50,755	11,611	32,865	5,727
Totals	$38,659,149	$12,548,274	$27,624,269	$5,320,705	$16,901,952	$927,251

Source: A.M. Best Company, Inc., Best's Executive Data Service.

Direct Written Premiums by Line, 1987 (000 omitted)

State	Commercial multi-peril	Workers' compensation	Medical malpractice	Other liability	Fire	Allied lines
Alabama	$ 219,021	$ 340,709	$ 66,541	$ 272,974	$ 74,852	$ 32,573
Alaska	68,893	160,424	15,569	65,361	15,345	3,458
Arizona	285,769	218,645*	101,156	323,506	35,512	29,665
Arkansas	123,138	203,366	21,672	152,286	57,320	33,276
California	3,142,866	4,890,827*	689,863	3,227,875	410,484	227,264
Colorado	263,121	255,226*	24,505	273,353	30,317	40,732
Connecticut	388,153	603,115	68,264	633,819	60,287	34,242
Delaware	44,135	81,489	18,051	83,142	10,116	5,950
Dist. of Col.	68,547	133,463	35,701	130,179	9,647	3,867
Florida	1,008,363	1,118,325	191,114	973,791	149,274	225,593
Georgia	387,218	696,960	155,785	480,503	109,263	59,349
Hawaii	70,153	231,783	19,619	127,235	18,131	10,330
Idaho	59,986	81,385*	14,516	66,693	13,013	17,900
Illinois	866,631	1,423,801	289,063	1,534,287	162,114	137,261
Indiana	374,435	289,612	35,399	401,255	72,997	44,618
Iowa	151,902	225,940	41,097	249,923	45,510	109,061
Kansas	145,644	223,489	33,634	191,815	36,928	64,851
Kentucky	171,763	250,777	63,567	217,862	55,095	26,910
Louisiana	211,078	438,586	55,841	345,451	104,837	96,887
Maine	96,813	217,187	26,997	91,757	22,134	8,878
Maryland	333,041	509,683*	119,318	429,499	50,758	29,381
Massachusetts	597,141	924,738	27,438	790,057	126,119	51,433
Michigan	684,088	830,919*	192,024	1,325,276	110,311	49,141
Minnesota	340,516	515,225	56,851	485,456	54,275	95,989
Mississippi	90,406	187,149	20,734	123,516	82,083	57,019
Missouri	359,167	463,799	86,888	511,775	74,244	57,261
Montana	52,886	57,522*	15,179	57,504	13,162	19,214
Nebraska	103,061	120,141	20,033	118,196	25,626	75,431
Nevada	112,812	3,527*	26,912	98,623	14,351	7,403
New Hampshire	107,318	183,463	14,076	140,426	19,682	9,594
New Jersey	970,503	970,686	247,792	1,214,574	114,618	73,324
New Mexico	84,160	162,135	4,861	83,988	14,977	13,229
New York	2,150,116	1,203,185*	712,817	2,944,747	299,342	107,368
North Carolina	296,583	384,813	83,558	359,652	92,964	69,998
North Dakota	39,563	2,636*	16,147	41,402	11,793	58,478
Ohio	704,955	36,132*	235,167	941,460	150,771	67,221
Oklahoma	175,940	210,320*	9,100	208,567	60,892	51,274
Oregon	194,156	324,615*	40,488	209,547	53,840	22,702
Pennsylvania	885,198	1,654,661*	237,626	1,287,781	184,499	72,282
Rhode Island	86,855	156,846	6,091	135,537	16,797	7,735
South Carolina	161,375	298,231	9,142	161,831	55,917	40,035
South Dakota	40,162	51,371	10,864	39,586	10,369	25,947
Tennessee	281,079	410,304	88,838	316,524	90,620	33,138
Texas	752,040	2,454,621	165,652	1,372,742	378,493	284,067
Utah	91,115	48,713*	22,279	109,047	16,267	7,916
Vermont	58,292	66,971	10,919	63,449	12,253	4,240
Virginia	365,990	515,682	91,907	456,250	79,113	34,013
Washington	319,097	49,309*	87,820	384,607	59,319	35,566
West Virginia	71,217	2,169*	37,619	83,739	32,330	11,567
Wisconsin	290,565	556,778	36,439	429,887	56,711	39,851
Wyoming	40,257	6,126*	9,077	25,926	8,401	6,171
Totals	$18,987,341	$25,447,780*	$4,711,610	$24,791,235	$3,864,080	$2,730,652

** Does not include premiums written by state workers' compensation funds.*

Source: A.M. Best Company, Inc., Best's Executive Data Service.

Direct Written Premiums by Line, 1987 (000 omitted)

State	Inland marine	Ocean marine	Surety	Fidelity	Burglary & theft	Boiler & machinery
Alabama	$ 69,000	$ 10,561	$ 23,226	$ 11,903	$ 1,458	$ 7,781
Alaska	20,043	6,313	11,537	1,904	66	2,417
Arizona	45,589	3,125	40,295	8,578	891	4,943
Arkansas	46,250	3,108	10,092	6,749	490	5,008
California	691,435	109,984	252,307	121,252	11,602	45,622
Colorado	63,061	2,667	28,467	11,659	1,626	7,338
Connecticut	105,918	22,758	19,825	22,266	3,343	11,939
Delaware	15,468	4,164	13,116	2,820	489	1,628
Dist. of Col.	18,950	2,332	17,565	19,368	891	3,059
Florida	298,291	63,939	110,938	40,185	5,525	20,500
Georgia	131,784	14,302	38,654	21,280	3,329	12,146
Hawaii	12,984	5,089	11,941	4,699	603	1,199
Idaho	15,896	682	5,865	2,541	190	2,318
Illinois	269,187	33,052	83,327	72,686	7,494	37,002
Indiana	89,456	4,790	24,880	15,852	1,481	13,671
Iowa	47,889	1,285	13,079	9,746	1,044	7,487
Kansas	48,524	1,169	16,165	9,617	812	6,289
Kentucky	57,617	6,641	24,772	9,957	1,193	7,311
Louisiana	78,509	63,448	25,787	11,911	1,401	15,624
Maine	22,615	8,590	10,841	2,911	547	3,672
Maryland	83,979	16,297	37,085	17,445	2,905	9,757
Massachusetts	156,999	42,693	44,649	34,559	3,715	17,169
Michigan	144,956	23,169	34,512	31,849	3,153	21,144
Minnesota	98,294	13,716	28,898	27,828	2,347	11,196
Mississippi	49,046	3,199	13,747	7,482	1,278	4,562
Missouri	104,835	31,493	28,781	23,886	2,847	11,646
Montana	11,268	183	6,461	2,655	240	1,747
Nebraska	33,170	788	10,970	7,073	750	3,778
Nevada	20,239	1,042	13,004	3,186	1,170	1,925
New Hampshire	23,131	10,041	6,174	4,133	432	2,964
New Jersey	205,633	34,557	60,914	43,137	6,564	23,582
New Mexico	20,807	3,002	21,675	3,894	416	2,547
New York	470,099	424,523	134,218	224,941	18,918	45,675
North Carolina	102,157	11,763	29,738	18,232	2,678	12,878
North Dakota	11,345	117	5,676	2,615	280	2,395
Ohio	173,056	17,721	51,196	35,834	7,970	25,425
Oklahoma	59,576	3,673	17,755	11,320	1,209	4,909
Oregon	47,467	15,703	22,248	8,437	1,200	6,462
Pennsylvania	199,646	27,683	59,712	62,843	4,832	30,105
Rhode Island	26,199	9,605	6,660	4,456	485	2,421
South Carolina	52,592	5,068	18,557	6,085	1,024	5,670
South Dakota	10,214	73	4,539	2,613	301	1,401
Tennessee	82,222	12,860	30,774	15,181	1,890	8,113
Texas	366,554	138,397	126,115	60,068	5,999	38,540
Utah	20,297	1,054	11,012	5,633	428	2,792
Vermont	10,008	2,035	2,220	1,908	236	1,542
Virginia	95,279	18,260	41,899	22,378	2,686	12,274
Washington	95,158	50,524	42,556	17,257	2,028	10,360
West Virginia	19,746	2,120	10,781	5,339	538	3,558
Wisconsin	70,402	6,426	17,439	16,237	2,954	14,069
Wyoming	7,585	201	7,718	1,645	118	1,357
Totals	$5,023,425	$1,295,984	$1,730,364	$1,138,033	$126,065	$558,915

Source: A.M. Best Company, Inc., Best's Executive Data Service.

Direct Written Premiums by Line, 1987 (000 omitted)

State	Glass	Aircraft	Earthquake	Credit	Accident & health	Miscellaneous
Alabama	$ 252	$ 9,612	$ 261	$ 1,800	$ 49,315	$ 32,358
Alaska	4	23,742	1,301	2,856	2,341	9,364
Arizona	217	17,480	1,220	1,531	29,115	31,510
Arkansas	143	7,850	1,126	226	20,567	15,660
California	3,971	119,445	240,837	18,344	257,608	209,932
Colorado	262	14,372	763	1,189	43,366	26,790
Connecticut	303	29,122	352	2,112	17,780	26,046
Delaware	68	3,139	107	159	15,923	6,773
Dist. of Col.	27	19,945	158	31	21,802	8,174
Florida	1,458	47,328	1,609	4,411	146,400	138,124
Georgia	297	41,094	811	5,540	71,412	64,511
Hawaii	194	8,179	352	299	10,574	6,984
Idaho	47	5,100	178	576	8,750	3,220
Illinois	2,394	61,259	3,338	9,242	269,042	81,472
Indiana	361	12,987	1,202	2,499	73,468	26,145
Iowa	467	6,624	424	906	51,164	15,668
Kansas	339	15,474	317	889	48,937	19,012
Kentucky	327	7,478	2,135	757	28,412	52,270
Louisiana	244	19,128	507	1,342	39,551	42,323
Maine	62	3,060	135	235	7,161	10,109
Maryland	285	8,015	– 403	6,655	38,716	41,555
Massachusetts	1,231	14,485	1,884	6,214	37,058	54,406
Michigan	685	51,911	904	3,707	85,096	54,404
Minnesota	304	23,151	388	2,564	95,024	27,865
Mississippi	171	5,745	460	672	31,217	17,425
Missouri	365	28,260	5,719	3,255	96,573	41,982
Montana	32	3,394	176	27	6,460	3,476
Nebraska	195	5,497	160	308	37,510	10,488
Nevada	80	5,942	613	– 641	10,196	5,855
New Hampshire	60	4,118	223	546	7,118	8,973
New Jersey	1,133	30,377	891	6,241	65,447	66,625
New Mexico	70	5,436	286	181	10,322	8,397
New York	1,619	58,494	2,281	28,627	258,304	125,283
North Carolina	376	16,529	577	6,354	49,779	49,371
North Dakota	47	2,245	23	599	14,504	2,432
Ohio	1,108	30,067	2,240	4,210	364,053	67,096
Oklahoma	263	16,364	719	762	22,809	27,391
Oregon	229	12,189	811	2,037	22,197	16,931
Pennsylvania	831	29,115	1,089	6,171	118,487	76,674
Rhode Island	61	3,041	233	859	9,940	6,633
South Carolina	178	6,415	2,281	1,302	21,654	30,300
South Dakota	65	1,898	30	223	17,488	2,499
Tennessee	286	13,710	3,484	3,190	49,868	33,343
Texas	1,512	101,376	1,116	5,566	185,986	149,717
Utah	62	7,755	727	588	23,550	10,979
Vermont	38	1,023	99	110	4,019	3,029
Virginia	459	15,274	615	5,145	51,194	69,479
Washington	447	30,910	2,802	566	28,505	41,336
West Virginia	294	2,552	162	504	14,124	8,276
Wisconsin	687	12,978	352	1,839	157,707	28,206
Wyoming	33	1,964	86	46	4,236	1,674
Totals	$24,643	$1,022,649	$288,163	$153,373	$3,152,827	$1,918,544

Source: A.M. Best Company, Inc., Best's Executive Data Service.

Premium Taxes

Insurance companies—including life, health and property/casualty companies—paid more than $6.38 billion in premium taxes to the 50 states and the District of Columbia in 1987—an increase of about 16 percent over the 1986 total. Approximately 47 percent of this amount was paid by property/casualty companies.

Premium taxes are taxes imposed on gross premiums or adjusted gross premiums, and as such amount to an additional form of taxation on policyholders. Additional payments are made to states for licenses and fees, property taxes, sales and use taxes, unemployment compensation taxes, and in a few states, income and franchise taxes. Premium taxes accounted for about 2.6 percent of all taxes collected by the states during 1987.

The Bureau of the Census said the broad category of sales and gross receipts taxes was by far the largest source of state tax revenue in fiscal 1987, accounting for 48.5 percent of all state tax collections in that year. Individual income taxes, at 31 percent, were the second largest source.

Premium Taxes by State, 1987

Alabama	$ 125,401,000	Missouri	$ 145,047,000
Alaska	23,659,000	Montana	25,304,000
Arizona	79,269,000	Nebraska	30,895,000
Arkansas	52,189,000	Nevada	40,700,000
California	1,008,887,000	New Hampshire	30,219,000
Colorado	82,331,000	New Jersey	147,891,000
Connecticut	140,323,000	New Mexico	41,854,000
Delaware	23,158,000	New York	458,965,000
District of Columbia	27,034,000	North Carolina	139,941,000
Florida	254,760,000	North Dakota	12,203,000
Georgia	154,462,000	Ohio	223,044,000
Hawaii	36,463,000	Oklahoma	121,208,000
Idaho	32,519,000	Oregon	55,704,000
Illinois	178,752,000	Pennsylvania	306,497,000
Indiana	96,250,000	Rhode Island	27,523,000
Iowa	76,490,000	South Carolina	87,537,000
Kansas	64,986,000	South Dakota	22,294,000
Kentucky	136,642,000	Tennessee	126,575,000
Louisiana	182,435,000	Texas	460,963,000
Maine	28,167,000	Utah	28,990,000
Maryland	120,653,000	Vermont	14,708,000
Massachusetts	215,088,000	Virginia	158,495,000
Michigan	160,952,000	Washington	91,876,000
Minnesota	107,091,000	West Virginia	43,803,000
Mississippi	66,358,000	Wisconsin	73,857,000
		Wyoming	18,909,000
		Total	$6,382,557,000

Source: Bureau of the Census, U.S. Department of Commerce

Insurance Guaranty Funds

All 50 states, the District of Columbia and Puerto Rico have established procedures under which solvent property and casualty insurance companies absorb losses of claimants against insolvent insurers. New York for many years has had a pre-assessment fund law which requires the permanent maintenance of an insolvency fund (to which companies contribute) with a statutory $200 million ceiling. The other jurisdictions have set up insurance guaranty associations through which solvent companies pay assessments as needed, on a proportionate basis.

From the inception of the post-assessment funds in 1969 through December 1987, the associations have collected $2,314,419,887 from insurers to cover 153 property and casualty insurance company insolvencies, including 11 in 1987. Of that total, about $163.2 million has been refunded to the companies.

The figures do not include assessments made under New York's pre-assessment insolvency fund nor payments made by individual companies under the insolvency provision of the uninsured motorist endorsement to auto insurance policies. They also do not take into consideration recoupments available in some states through premium tax offsets and policyholder surcharges.

Guaranty Fund Assessments by State, 1969–1987
(000 omitted)

State	Amount collected	Amount refunded	Net assessments	State	Amount collected	Amount refunded	Net assessments
Ala.	$ 24,692	$ 0	$ 24,692	Mo.	$ 24,434	$ 849	$ 23,585
Alaska	10,746	1,335	9,410	Mont.	25,297	258	25,040
Ariz.	28,303	0	28,303	Neb.	14,465	7,309	7,157
Ark.	14,799	0	14,799	Nev.	13,892	2,380	11,511
Calif.	516,863	41,767	475,096	N.H.	8,624	843	7,781
Colo.	18,330	960	17,370	N.J.	23,897	12,479	11,419
Conn.	24,014	4,169	19,844	N.M.	8,352	0	8,352
Del.	16,359	0	16,359	N.Y.	*	*	*
D.C.	1,899	74	1,825	N.C.	34,436	1,121	33,315
Fla.	326,714	6,829	319,885	N.D.	4,315	0	4,315
Ga.	33,456	4,834	28,622	Ohio	140,585	5,878	134,707
Hawaii	25,605	500	25,105	Okla.	23,088	0	20,088
Idaho	26,087	0	26,087	Ore.	20,033	0	20,033
Ill.	144,835	7,265	137,570	Pa.	128,255	7,301	120,954
Ind.	8,538	1,245	7,293	P.R.	49,693	17,913	31,780
Iowa	20,579	525	20,053	R.I.	5,490	1,225	4,265
Kan.	11,750	72	11,678	S.C.	11,393	782	10,610
Ky.	18,827	662	18,164	S.D.	2,954	0	2,954
La.	64,611	3,973	60,638	Tenn.	12,986	280	12,706
Maine	10,562	649	9,913	Texas	50,442	0	50,442
Md.	16,661	1,090	15,571	Utah	120	0	120
Mass.	34,425	8,845	25,580	Vt.	4,306	114	4,192
Mich.	110,130	8,492	101,638	Va.	10,427	0	10,427
Minn.	110,614	6,030	104,584	Wash.	17,617	292	17,325
Miss.	15,189	1,067	14,122	W.Va.	14,884	782	14,102
				Wis.	27,715	2,999	24,716
				Wyo.	2,132	30	2,103
				Total	$2,314,420	$163,222	$2,151,198

*New York has a pre-assessment fund.
Source: National Committee on Insurance Guaranty Funds.

3. Shared Markets

The Automobile Shared Market

The insurance industry has established mechanisms in every state to provide automobile insurance for drivers who, for whatever reason, are unable to obtain coverage in the voluntary market. The first of the shared market mechanisms was established in New Hampshire in 1938. Today, all 50 states and the District of Columbia use one of four systems to guarantee the availability of auto insurance.

- Automobile Insurance Plan—Auto insurance applicants unable to obtain coverage in the competitive market are distributed to insurance companies in proportion to the amount of business each insurer writes voluntarily in the state. Each insurer services the policyholders, as it services other customers.
- Joint Underwriting Association—JUAs are pooling mechanisms where all companies share in the profits and losses as well as expenses incurred. Agents submit applications to several companies which have agreed to issue and service policies.
- Reinsurance Facility—Under this pooling system, each auto insurer is required to provide coverage and service the claims for any applicant, but is permitted to transfer a percentage of its policies to the facility. Profits or losses are shared by all insurers licensed in the state.
- State Fund—Maryland established a state funded mechanism in 1973. Private insurers don't participate directly in the Maryland Automobile Insurance Fund, but are required by law to subsidize any losses from the operation, with the cost being charged back against their own policyholders.

Data provided by the Automobile Insurance Plans Service Office (AIPSO) reflect an increase of 14.7 percent from 1986 to 1987 in the number of cars insured through the various shared market mechanisms countrywide. The increase in volume was about the same in 1985 and 1986 after declines in both 1983 and 1984.

The individual plans of 34 jurisdictions reported increases in the number of vehicles insured in 1987. States with the greatest numbers of private passenger cars insured through the shared market facilities in 1987 were Massachusetts, with more than 1.97 million; New Jersey, with 1.77 million; and New York, with 1.25 million. No other state plan insured as many as a million vehicles.

State by state data are tabulated on the next page.

Private Passenger Cars Insured through the Shared Market Mechanisms, 1986–1987 (Written Car Years)

State	Insured in shared market, 1987	Insured in shared market, 1986	% Change 1986–87
Alabama	2,767	3,308	– 16.35%
Alaska	4,788	4,045	+ 18.37
Arizona	202	348	– 41.95
Arkansas	2,069	1,701	+ 21.63
California	485,691	442,043	+ 9.87
Colorado	572	347	+ 64.84
Connecticut	189,037	157,607	+ 19.94
Delaware	28,874	18,955	+ 52.33
District of Columbia	31,401	29,659	+ 5.87
Florida	122,768	80,179	+ 53.12
Georgia	43,724	22,754	+ 92.16
Hawaii	5,901	6,440	– 8.37
Idaho	381	479	– 20.46
Illinois	4,146	4,637	– 10.59
Indiana	1,760	1,570	+ 12.10
Iowa	766	620	+ 23.55
Kansas	10,704	12,283	– 12.86
Kentucky	34,466	37,457	– 7.99
Louisiana	10,828	13,361	– 18.96
Maine	25,582	16,282	+ 57.12
Maryland	97,387	87,785	+ 10.94
Massachusetts	1,972,506*	1,725,403	+ 14.26
Michigan	191,685	193,323	– .85
Minnesota	17,558	8,881	+ 97.70
Mississippi	8,647	8,148	+ 6.12
Missouri	14,061	4,662	+ 201.61
Montana	214	317	– 32.49
Nebraska	722	735	– 1.77
Nevada	85	124	– 31.45
New Hampshire	166,630*	164,289	+ 1.42
New Jersey	1,771,106	1,697,384	+ 4.34
New Mexico	341	511	– 33.27
New York	1,250,232	1,134,387	+ 10.21
North Carolina	888,459*	750,557	+ 18.37
North Dakota	188	164	+ 14.63
Ohio	639	669	– 4.48
Oklahoma	3,656	3,174	+ 15.19
Oregon	2,252	1,849	+ 21.80
Pennsylvania	135,255	110,964	+ 21.89
Rhode Island	60,239	47,832	+ 25.94
South Carolina	617,079	421,012	+ 46.57
South Dakota	489	355	+ 37.75
Tennessee	23,132	18,001	+ 28.50
Texas	256,257	153,115	+ 67.36
Utah	106	54	+ 96.30
Vermont	10,182	7,008	+ 45.29
Virginia	143,593	134,779	+ 6.54
Washington	4,304	4,613	– 6.70
West Virginia	4,181	4,306	– 2.90
Wisconsin	1,590	1,493	+ 6.50
Wyoming	167	176	– 5.11
Countrywide	8,649,369	7,541,145	+ 14.70

*Estimated.

Sources: State shared-market mechanisms in Maryland, Massachusetts and Texas (for 1986 only); Automobile Insurance Plans Service Office for all other states.

Insurance through FAIR and Windstorm Plans

Continuation of a "firm" standard insurance market was believed to be largely responsible for the third increase in as many years in the number of policies issued through the special Fair Access to Insurance Requirement (FAIR) Plans which provide insurance to many property owners in inner city and other high risk areas. The insurance industry-operated plans first came into existence in the 1960s to make property insurance coverages more readily available to property owners who often had difficulty obtaining insurance because of abnormal exposure to threatening hazards over which they had no control.

FAIR Plans are operative in 27 states, the District of Columbia and Puerto Rico.

Data provided by the National Committee on Property Insurance reflect a 6.4 percent increase, from 858,166 in 1986 to 913,041 in 1987, in the number of policies issued by the various plans. A 3 percent increase in the number of policies issued in 1985 marked the first such hike in five years. New applicants accounted for about 27 percent of the policies issued in 1987.

The amount of insurance in force in California and Oregon at the close of 1987 was not available, but for the other states the total of more than $34.8 billion was just over 1 percent greater than the total shown for the same states at the end of 1986.

Beach and windstorm plans, which operate in seven states along the Atlantic and Gulf Coasts where vulnerability to severe windstorm damage is especially high, also reported increased activity again in 1987. The number of policies issued was up about 8.5 percent, and the $13.7 billion of insurance in force at year end was 3.2 percent greater than the total at the end of 1986.

The tables on the following page show the numbers of policies requested of and issued by the FAIR and beach and windstorm plans in 1987, along with the amounts of insurance in force at the close of the year. The FAIR plans table excludes Puerto Rico, for which no 1987 data were available.

Insurance Provided by FAIR Plans

Jurisdiction	Applications, 1987 New	Applications, 1987 Renewal	Binders or policies issued, 1987 New	Binders or policies issued, 1987 Renewal	Insurance in force 12/31/87 (000 omitted)
California	75,329	104,732	30,527	98,678	*
Connecticut	3,157	4,239	1,341	3,906	$ 450,790
Delaware	927	1,921	548	1,787	65,863
District of Columbia	2,378	4,493	1,035	4,175	401,177
Georgia	5,833	5,359	3,359	4,457	396,065
Illinois	13,394	23,833	6,149	18,449	1,121,958
Indiana	1,250	2,702	707	2,068	78,263
Iowa	651	889	405	884	40,096
Kansas	5,053	6,433	3,696	6,559	261,180
Kentucky	22,631	0	17,090	42,372	1,856,707
Louisiana	6,167	2,847	1,897	2,553	145,669
Maryland	5,802	11,834	2,195	11,092	446,612
Massachusetts	24,232	48,984	14,283	45,541	3,345,744
Michigan	57,897	164,106	53,775	147,577	11,025,819
Minnesota	3,830	904	1,841	568	109,023
Missouri	19,886	27,666	6,889	23,139	674,122
New Jersey	20,375	54,209	13,405	48,879	3,613,820
New Mexico	3,987	3,532	3,972	3,532	352,336
New York	29,724	80,477	20,590	80,477	5,218,632
North Carolina	27,264	22,258	16,254	14,474	1,089,703
Ohio	9,680	15,097	11,766	15,097	502,172
Oregon	2,202	4,080	2,120	4,080	*
Pennsylvania	30,893	76,289	17,771	62,448	2,138,347
Rhode Island	4,232	7,772	3,089	7,072	433,206
Virginia	8,000	11,988	5,028	11,331	600,706
Washington	305	628	197	587	86,127
West Virginia	3,039	171	2,083	134	45,919
Wisconsin	5,521	9,156	2,743	6,370	295,958
Totals	393,639	696,599	244,755	668,286	$34,796,014

*Not available.
Source: National Committee on Property Insurance.

Insurance Provided by Beach and Windstorm Plans

State	Applications, 1987 New	Applications, 1987 Renewal	Binders or policies issued, 1987 New	Binders or policies issued, 1987 Renewal	Insurance in force 12/31/87 (000 omitted)
Alabama	810	3,243	633	3,243	$ 292,503
Florida	11,957	47,612	9,224	47,612	6,011,325
Louisiana	1,627	6,249	1,359	6,413	205,999
Mississippi	5,656	8,181	5,148	8,065	516,482
North Carolina	6,192	10,999	4,044	8,475	1,234,913
South Carolina	1,363	5,428	1,318	5,424	1,185,595
Texas	69,390	*	43,353	*	4,288,486
Totals	96,995	81,712	65,079	79,232	$13,735,303

*Included with New.
Source: National Committee on Property Insurance.

Flood Insurance in the United States

Insurance against flood and mudslide losses is available to property owners in participating communities in every state, the District of Columbia, Puerto Rico, Guam and the Virgin Islands under a program established by the Flood Disaster Protection Act of 1973. The National Flood Insurance Program (NFIP) was developed jointly by the insurance business and the Federal Insurance Administration (FIA), a part of the Federal Emergency Management Agency. Administered by the FIA for several years, the program was opened to private insurers in October 1983 under a "Write Your Own" procedure providing for government reimbursement of losses not covered by premiums and income derived from the investment of those premiums.

As a result of the Write Your Own program, the number of policies issued directly by the government declined by almost 30 percent from 959,801 in 1986 to 673,652 in 1987, after a similar drop in the previous year. The amount of insurance in force under those policies declined from $62.7 billion to $473 million. The number of Write Your Own policies jumped from 1,094,283 in 1986 to 1,383,028 in 1987, and the amount of insurance in force under those policies climbed from $88.2 billion to $113.4 billion.

Overall, the amount of flood insurance in force dropped by almost 25 percent from about $151 billion at year end 1986 to $113.8 billion at the close of 1987.

More than 20,000 communities have identified special flood hazard areas, and about 18,000 of them have qualified for the coverage by agreeing to take steps to minimize future flood damage. Flood insurance is available only in participating communities, and the failure of flood-prone communities to participate has significant impact on the availability of funds for certain mortgages.

The table on page 52 shows the amount of flood insurance provided in 1987 through the government and the private insurance programs in each jurisdiction, and the total amount provided through the two progams countrywide.

Flood Insurance in the United States, 1987

State	Direct NFIP business		Write your own business		NFIP and WYO combined	
	No. of policies	Ins. in force (000 omitted)	No. of policies	Ins. in force (000 omitted)	No. of policies	Ins. in force* (000 omitted)
Alabama	6,782	$ 4,054	10,394	$ 734,503	17,176	$ 738,557
Alaska	1,324	923	848	61,122	2,172	62,045
Arizona	11,140	7,154	9,717	668,777	20,857	675,931
Arkansas	4,194	1,850	2,488	111,303	6,682	113,153
California	69,166	56,213	41,534	3,393,619	110,700	3,449,832
Colorado	5,509	3,849	2,723	183,050	8,232	186,899
Connecticut	11,834	10,141	5,739	564,253	17,573	574,394
Delaware	1,914	1,873	4,796	489,708	6,710	491,581
Dist. of Col.	35	45	7	675	42	720
Florida	95,698	72,248	618,629	52,985,396	714,327	53,059,645
Georgia	7,891	5,705	12,039	1,056,316	19,930	1,062,021
Hawaii	5,680	5,937	3,574	411,039	9,524	416,975
Idaho	1,178	601	506	33,013	1,684	33,613
Illinois	15,621	7,685	7,863	392,254	23,484	399,939
Indiana	8,155	3,249	4,551	194,706	12,706	195,955
Iowa	2,976	1,185	1,474	66,523	4,450	67,708
Kansas	5,269	2,081	1,613	69,948	6,882	72,028
Kentucky	5,374	2,615	8,587	399,032	13,961	401,647
Louisiana	50,871	34,854	189,912	13,794,171	240,783	13,829,025
Maine	2,274	1,269	3,016	173,958	5,290	175,227
Maryland	7,677	5,575	15,252	1,267,770	22,929	1,273,345
Massachusetts	21,196	15,955	4,054	331,542	25,250	347,497
Michigan	9,455	4,938	7,899	427,740	17,354	432,678
Minnesota	3,032	1,572	1,867	89,543	4,899	91,115
Mississippi	8,217	4,843	24,651	1,516,950	32,868	1,521,793
Missouri	10,192	4,292	4,360	205,040	14,552	209,332
Montana	1,166	505	262	11,908	1,428	12,414
Nebraska	4,633	1,940	2,855	133,645	7,488	135,585
Nevada	3,529	1,968	1,856	98,374	5,385	100,341
New Hampshire	1,934	1,138	1,022	63,904	2,956	65,041
New Jersey	52,563	45,711	61,207	5,572,383	113,770	5,618,093
New Mexico	3,005	1,245	1,633	84,652	4,638	85,897
New York	41,239	30,010	21,117	1,708,750	62,356	1,738,759
North Carolina	16,929	12,550	21,137	1,608,637	38,066	1,621,187
North Dakota	3,530	1,416	1,600	67,017	5,130	68,433
Ohio	9,550	4,176	4,808	219,541	14,358	223,717
Oklahoma	8,209	5,200	3,275	213,967	11,484	219,167
Oregon	4,049	2,486	1,456	82,687	5,505	85,173
Pennsylvania	27,313	13,148	28,092	1,418,686	55,405	1,431,834
Rhode Island	5,609	4,168	2,020	181,092	7,629	185,260
South Carolina	6,705	5,723	39,656	4,145,813	46,361	4,151,537
South Dakota	626	325	191	9,865	817	10,190
Tennessee	3,780	2,128	2,907	175,695	6,687	177,823
Texas	62,515	52,780	162,760	15,274,470	225,275	15,327,249
Utah	1,103	560	450	24,645	1,552	25,204
Vermont	1,050	446	963	46,472	2,013	46,918
Virginia	12,820	9,349	23,548	2,059,625	36,368	2,068,975
Washington	8,136	4,960	2,306	137,769	10,442	142,729
West Virginia	6,286	2,382	7,044	272,168	13,330	274,550
Wisconsin	4,659	2,148	1,638	73,163	6,297	75,311
Wyoming	905	494	491	26,080	1,396	26,574
Guam	26	11	0	0	26	11
Puerto Rico	7,733	2,467	274	11,761	8,007	14,228
Virgin Islands	1,396	794	368	25,908	1,764	26,703
Totals	673,652	$472,932	1,383,028	$113,370,624	2,056,680	$113,843,557

*Some totals do not balance because of rounding.

Source: Federal Insurance Administration, Federal Emergency Management Agency.

Federal Crime Insurance

The Federal Crime Insurance Program, established by Congress in 1970, began operation Aug. 1, 1971. It is administered by the federal insurance administrator, who is authorized to make federal crime insurance policies available in states in which that official perceives an availability problem. Policies, offered to both individuals and businesses, cover losses due to burglary and robbery.

Nat-Con-Serv, Inc., a Maryland corporation, acts as the servicing carrier in participating states. Policies are sold through licensed property insurance agents and brokers.

In 1987, 22 states, the District of Columbia, Puerto Rico and the Virgin Islands were participating in the program.

The Federal Insurance Administration reported that from the end of 1986 to year end 1987 the number of policies in force decreased about 10 percent from 32,641 to 29,518. The amount of coverage in force declined by 1 percent, from $286.8 million to $283 million.

Federal Crime Insurance: 1987

	Policies in force at year end			Insurance in force at year end (000 omitted)		
State	Residential	Commercial	Total	Residential	Commercial	Total
Alabama	714	14	728	$ 5,988	$ 102	$ 6,090
Arkansas	2	—	2	16	—	16
California	1,487	620	2,107	12,925	9,221	22,146
Colorado	2	2	4	17	4	21
Connecticut	91	17	108	761	199	960
Delaware	101	3	104	735	30	765
District of Columbia	45	78	123	374	981	1,355
Florida	1,468	735	2,203	13,308	9,757	23,065
Georgia	269	161	430	2,228	1,451	3,679
Illinois	277	311	588	2,251	2,884	5,135
Iowa	1	—	1	10	—	10
Kansas	250	20	270	1,765	195	1,960
Maryland	65	101	166	539	1,139	1,678
Massachusetts	207	122	329	1,549	1,500	3,049
Missouri	239	60	299	1,827	481	2,308
New Jersey	1,178	256	1,434	9,883	3,297	13,180
New York	12,331	4,965	17,287	105,159	64,322	169,481
North Carolina	53	6	59	432	64	496
Ohio	149	58	207	1,089	456	1,545
Pennsylvania	1,446	453	1,899	10,789	4,707	15,496
Rhode Island	23	23	46	182	151	333
Tennessee	132	122	255	1,058	991	2,049
Virginia	11	1	12	81	4	85
Puerto Rico	573	163	736	5,110	1,949	7,059
Virgin Islands	97	25	122	817	304	1,121
Totals	21,211	8,307	29,518	$178,893	$104,189	$283,082

Source: Federal Insurance Administration, Crime Insurance Statistical Report

5. Factors Affecting Costs

Trends in Costs of Goods, Services and Insurance

The cost of insurance is influenced heavily by the costs of the materials and services for which property/casualty insurers must pay in meeting their obligations to their policyholders. Tabulated below and on the following page are indices showing the trends of costs of household and auto insurance and of typical factors which affect insurance claims. The cost of living index for all items rose 3.7 percent from 1986 to 1987 after a 1.9 percent increase in the previous year.

Except as otherwise noted, all index figures are annual averages.

Price Indices for Property Insurance and Related Items and Annual Rates of Change, 1978–1987

(Base: Except as Otherwise Noted, 1967=100)

Year	Cost of living (all items) Index	% Change	Homeowners' costs* Index	% Change	House maintenance and repairs Index	% Change
1978	195.4				233.0	
1979	217.4	+11.3%			256.4	+10.0%
1980	246.8	+13.5			285.7	+11.4
1981	272.4	+10.4			314.4	+10.0
1982	289.1	+ 6.1			334.1	+ 6.3
1983	298.4	+ 3.2	102.5		346.3	+ 3.7
1984	311.1	+ 4.3	107.3	+4.7%	359.2	+ 3.7
1985	322.2	+ 3.6	113.1	+5.4	368.9	+ 2.7
1986	328.4	+ 1.9	119.4	+5.6	373.8	+ 1.3
1987	340.4	+ 3.7	124.8	+4.5	387.3	+ 3.6
% Change, 1978-1987		+74.2		N.A.**		+66.2

Year	Renters' costs* Index	% Change	House furnishings Index	% Change	Household insurance Index	% Change
1978			154.3			
1979			163.1	+ 5.7%		
1980			174.2	+ 6.8		
1981			185.2	+ 6.3		
1982			193.8	+ 4.6		
1983	103.0		197.5	+ 1.9	103.2	
1984	108.6	+ 5.4%	199.1	+ 0.8	107.5	+ 4.2%
1985	115.4	+ 6.3	200.1	+ 0.5	112.4	+ 4.6
1986	121.9	+ 5.6	201.1	+ 0.5	119.2	+ 6.0
1987	128.1	+ 5.1	203.9	+ 1.4	124.0	+ 4.0
% Change, 1978-1987		N.A.**		+32.1		N.A.**

*Indexing of Homeowners' Costs, Renters' Costs and Household Insurance was started in 1983 with a base (index value) of 100 as of December 1982. Previously indexed items which have been discontinued include Home Ownership, whose average annual cost had increased by 130.3 percent from 1974 to 1983, and Property Insurance Premiums, whose average annual cost had increased by 139.6 percent from 1974 to 1983.

**Not applicable

Source: U.S. Department of Labor, Bureau of Labor Statistics

Price Indices for Auto Insurance and Related Items and Annual Rates of Change, 1978–1987

(Base: Except as Indicated, 1967 = 100)

Year	Medical care items		Hospital rooms		Physicians' fees		Auto repairs and maintenance*	
	Index	% Change	Index	% Change	Index	% Change	Index	% Change
1978	219.4		332.4		223.1		220.6	
1979	239.7	+ 9.3%	370.3	+ 11.4%	243.6	+ 9.2%	242.6	+ 10.0%
1980	265.9	+ 10.9	418.9	+ 13.1	269.3	+ 10.6	268.3	+ 10.6
1981	294.5	+ 10.8	481.1	+ 14.8	299.0	+ 11.0	293.6	+ 9.4
1982	328.7	+ 11.6	566.7	+ 15.7	327.1	+ 9.4	315.8	+ 7.6
1983	357.3	+ 8.7	619.7	+ 11.3	352.3	+ 7.7	330.0	+ 4.5
1984	379.5	+ 6.2	670.9	+ 8.3	376.8	+ 7.0	341.5	+ 3.5
1985	403.1	+ 6.2	710.5	+ 5.9	398.8	+ 5.8	351.4	+ 2.9
1986	433.5	+ 7.5	753.1	+ 6.0	427.7	+ 7.2	363.1	+ 3.3
1987	462.2	+ 6.6	807.5	+ 7.2	459.1	+ 7.3	377.7	+ 4.0
% Change, 1978–1987		+ 110.7		+ 142.9		+ 105.8		+ 71.2

Year	Auto crash parts prices**		Labor rates, auto repairs***		Auto insurance	
	Index	% Change	Index	% Change	Index	% Change
1978	120.6				216.6	
1979	133.0	+ 10.3%			228.7	+ 5.6%
1980	148.1	+ 11.4			247.4	+ 8.2
1981	168.8	+ 14.0			259.0	+ 4.7
1982	188.0	+ 11.4			275.7	+ 6.4
1983	193.6	+ 3.0			302.7	+ 9.8
1984	194.9	+ 0.7	$20.07		326.3	+ 7.8
1985	190.0	− 2.5	21.42	+ 7.0%	359.5	+ 10.2
1986	173.3	− 8.8	22.07	+ 3.0	407.2	+ 13.3
1987	170.6	− 1.6	22.84	+ 3.5	441.0	+ 8.3
% Change, 1978–1987		+ 56.1		N.A. ##		+ 103.6

* The cost of auto crash replacement is not reflected in this index, which includes prices for water pump replacement, motor tune-up, automatic transmission repair, front end alignment and chassis lubrication. The trend in the cost of parts commonly used to repair auto crash damage is reflected in the index of auto crash parts prices developed by State Farm Mutual Automobile Insurance Company.

** Base: Jan. 1, 1976 = 100. Index figure for each year is as of Jan. 1. Compilation discontinued after 1987.

*** Not computed as an index. Dollar figures, based on a new study, are countrywide average hourly labor rates applicable to sheet metal work only. Discontinued study whose findings previously were reported weighted four types of labor.

Not applicable.

Sources: Auto Crash Parts Prices, State Farm Mutual Automobile Insurance Company; Labor Rates, Auto Repairs, Allstate Insurance Company; other data, U.S. Department of Labor, Bureau of Labor Statistics.

Health Care Costs

The cost of health care in the United States in recent years has been the equivalent of more than 10 percent—11 percent in 1987—of the nation's gross national product, according to the Department of Health and Human Services (HHS). In 1987, the national health expenditure of some $497 billion amounted to an outlay of $2,043 for every man, woman and child in the country. The agency said the overall cost of health care was 8.5 percent higher in 1987 than in 1986.

HHS said hospital care accounted for $196.2 billion, or 39 percent of the nation's total health expenditures, in 1987. A steady increase in hospital room costs has been a major factor in the rising cost of health care.

The average rate for a semiprivate room in the United States was $254.87 as of January 1988, a 7 percent increase over the January 1987 figure of $237.78, according to a survey by the Health Insurance Association of America. State average rates ranged from a low of $140.50 in Mississippi to highs of $449.05 in the District of Columbia and $360.54 in California.

Hospital Semiprivate Room Rates*, January 1987–88

State	1988	1987	% Increase	State	1988	1987	% Increase
Alabama	$187.00	$176.11	6.2%	Missouri	$225.71	$213.47	5.7%
Alaska	330.66	317.82	4.0	Montana	218.73	214.22	2.1
Arizona	251.22	232.88	7.9	Nebraska	181.88	172.63	5.4
Arkansas	158.94	154.81	2.7	Nevada	223.92	223.39	0.2
California	360.54	328.21	9.9	New Hampshire	238.28	220.77	7.9
Colorado	261.25	242.08	7.9	New Jersey	228.73	212.32	7.7
Connecticut	344.28	333.29	3.3	New Mexico	233.88	232.13	0.8
Delaware	325.00	305.00	6.6	New York	265.69	254.19	4.5
Dist. of Col.	449.05	422.74	6.2	North Carolina	174.45	156.68	11.3
Florida	217.94	202.06	7.9	North Dakota	195.04	183.97	6.0
Georgia	161.91	151.89	6.6	Ohio	275.65	261.19	5.5
Hawaii	257.25	241.72	6.4	Oklahoma	187.72	178.49	5.2
Idaho	249.67	229.95	8.6	Oregon	286.65	263.46	8.8
Illinois	275.55	265.24	3.9	Pennsylvania	301.32	284.25	6.0
Indiana	223.81	205.52	8.9	Rhode Island	274.86	244.20	12.6
Iowa	201.96	192.79	4.8	South Carolina	159.48	145.23	9.8
Kansas	216.23	200.74	7.7	South Dakota	181.85	174.67	4.1
Kentucky	215.32	198.65	8.4	Tennessee	172.62	161.83	6.7
Louisiana	208.56	199.69	4.4	Texas	198.78	183.40	8.4
Maine	257.20	231.86	10.9	Utah	242.48	234.23	3.5
Maryland	231.69	213.25	8.6	Vermont	284.48	257.02	10.7
Massachusetts	312.04	286.47	8.9	Virginia	195.01	180.99	7.7
Michigan	293.78	279.67	5.0	Washington	281.04	268.39	4.7
Minnesota	243.59	223.31	9.1	West Virginia	196.00	180.70	8.5
Mississippi	140.50	124.80	12.6	Wisconsin	185.83	171.56	8.3
				Wyoming	188.83	177.14	6.6
				Puerto Rico	139.77	131.32	6.5
				Countrywide	$254.87	$238.78	6.7

*Data apply to medical-surgical semiprivate accommodations and exclude pediatric, intensive care, cardiac care, extended care, self-care, psychiatric and tuberculosis beds.

Source: Health Insurance Association of America

Personal Injury Lawsuits

The frequency of lawsuits and the average size of court settlements, including jury verdicts, have a significant impact on the cost of liability insurance.

Jury Verdict Research, Inc. (JVR) reported a 12.7 percent increase from 1985 to 1986 in the average size of original personal injury jury awards across the United States. JVR noted that its analysis did not include defense verdicts, nor did it take into account appeals or other post-trial actions. Among the factors which influence jury awards, JVR observed, are health care costs, plaintiffs' loss of earnings, the severity of injuries and the general economic climate.

The research organization's analysis of more than 24,000 personal injury verdicts in 1986 included assessments of jury awards reported countrywide for five specific types of injuries representing claims from the least to the most severe.

JVR listed average verdicts of $59,581 (up from $22,591 in 1985) in cervical strain cases; $295,380 (up from $167,364) for knee injuries; $155,165 (up from $134,793) for vertebra fractures, and $1,329,154 (up from $1,093,952) in cases of wrongful deaths of adult males. Included for the first time was an analysis of awards resulting from paraplegia claims, exclusive of quadriplegia and brain damage cases. In those cases, JVR said verdicts averaged $2,669,183 in 1986.

The agency also has kept records of million-dollar verdicts since the first one was recorded in 1962. A decrease in the number of such awards in 1986 (to 397 from 441 in 1985) marked the first single-year decline since 1973. More than 2,700 million-dollar verdicts had been recorded through 1987, a year for which data were incomplete. States leading in million-dollar verdicts were New York, with 282; Florida, with 242, and California, with 232.

From 1980 through 1987, product liability suits accounted for the largest number of million-dollar awards, 458, followed by medical malpractice actions, 375, and vehicular liability cases, 286. Among injury categories, wrongful death claims accounted for 26.4 percent of the million-dollar awards. Some 17.5 percent of the verdicts were rendered in favor of plaintiffs who suffered brain damage, and 9.3 percent favored plaintiffs who experienced amputations.

The JVR data indicate that the number and size of medical malpractice and product liability verdicts generally have increased over the years, although there have been upward and downward fluctuations from year to year. JVR noted that plaintiffs alleging medical malpractice recovered awards less frequently, on average, than for other liabilities, but that the average size of awards was higher than those for other kinds of personal injury claims. Of 233 medical malpractice verdicts recorded in 1985 and 269 in 1986, some 34 percent in each year were for a million dollars

or more. The average size of medical malpractice awards increased from $1,179,095 in 1985 to $1,478,028 in 1986, the JVR study showed.

The number of product liability awards rose from 291 in 1985 to 321 in 1986, with the average size of such awards increasing from $1,091,005 to $1,161,522.

A more comprehensive reflection of the tendency of Americans to sue is contained in annual state-by-state compilations by the Administrative Office of the U.S. Courts of product liability lawsuits filed in federal courts. Of 15,143 cases filed in fiscal 1987, some 93.4 percent involved personal injuries, 2.5 percent were property damage filings and 3.5 percent were contract actions. The number of product liability filings was 11.4 percent higher than that recorded in the preceding fiscal year.

A state-by-state tabulation of product liability cases filed in federal district courts during the last two fiscal years appears below.

Product Liability Cases Commenced in Federal District Courts, 1986–1987

State	Fiscal 1987*	Fiscal 1986*	% Change	State	Fiscal 1987*	Fiscal 1986*	% Change
Ala.	149	122	+22.1%	N.J.	163	150	+ 8.7%
Alaska	23	43	−46.5	N.M.	55	54	+ 1.9
Ariz.	42	43	− 2.3	N.Y.	1,289	449	+187.1
Ark.	192	175	+11.4	N.C.	103	59	+ 74.6
Calif.	690	659	+ 4.7	N.D.	20	29	− 31.0
Colo.	68	116	−41.4	Ohio	1,308	1,200	+ 9.0
Conn.	508	390	+30.3	Okla.	231	234	− 1.3
Del.	15	27	−44.4	Ore.	54	67	− 19.4
D.C.	55	83	−33.7	Pa.	1,103	1,155	− 4.5
Fla.	367	449	−18.3	R.I.	47	42	+ 11.9
Ga.	407	294	+38.4	S.C.	187	212	− 11.8
Hawaii	311	162	+92.0	S.D.	32	19	+ 68.4
Idaho	21	26	−19.2	Tenn.	208	177	+ 17.5
Ill.	460	377	+22.0	Texas	2,535	1,685	+ 50.4
Ind.	117	180	−35.0	Utah	34	45	− 24.4
Iowa	72	59	+22.0	Vt.	11	12	− 8.3
Kan.	92	85	+ 8.2	Va.	451	183	+146.4
Ky.	96	157	− 38.9	Wash.	215	138	+ 55.8
La.	673	678	− 0.7	W. Va.	102	114	− 10.5
Maine	76	52	+46.2	Wis.	75	81	− 7.4
Md.	265	324	−18.2	Wyo.	21	16	+ 31.3
Mass.	501	550	− 8.9	P.R.	13	21	− 38.1
Mich.	439	458	− 4.1	Guam	1	0	+100.0
Minn.	102	207	−50.7	N.M.I.	0	0	—
Miss.	561	977	−42.6	V.I.	14	7	+100.0
Mo.	312	507	−38.5	Totals	15,143	13,595	+ 11.4
Mont.	50	54	− 8.0				
Neb.	115	92	+25.0				
Nev.	31	30	+ 3.3				
N.H.	59	68	−13.2				

*Twelve-month period ended June 30.

Source: Administrative Office of the U.S. Courts, 1987 Annual Report

Medical Malpractice

Professional liability insurance for physicians, commonly called medical malpractice insurance, is in a crisis situation which is impacting on the cost of medical care in the United States. The coverage is designed to protect physicians, surgeons, dentists and others in the medical profession from the financial consequences of their failure to use due care and the high degree of skill expected of a professional.

Today's crisis, stemming from a continuing increase in claims against doctors and sharp increases in medical malpractice insurance premiums, is reminiscent of that of the 1970s, when medical malpractice insurance became the focus of public attention because of a proliferation of lawsuits against doctors and other medical practitioners, including hospitals.

Insurance premiums for doctors in many states have risen significantly over the last few years, more than doubling in some cases, as a result of huge increases in claims costs. One major medical malpractice insurer said claims costs (loss and defense costs) rose nearly 150 percent in the five-year period 1982–86, from about $77.5 million to $191 million. The number of claims per 100 doctors rose from 13.5 to 17.2 over the same period, and has more than doubled in the last 10 years.

A January 1988 study by Jury Verdict Research, Inc. shows that of 269 medical malpractice awards reported to that organization in 1986, 92 or 34 percent totaled $1 million or more.

Physician-run companies are seeing the same upward trends as for-profit insurers. One physician-run company said settlements in the first seven months of 1986 exceeded the total for all of 1985, itself a record-breaking year. During that period there were 10 settlements or verdicts in excess of $1 million, compared with five in 1985 and six in all of the preceding 10 years.

The American Medical Association estimates that $12.1 billion, about 15 percent of the total amount spent on physician services in 1984, was attributable to rising professional liability costs. Of that amount, $9 billion, or almost 75 percent of the total, was due to defensive medicine—changes in the way physicians practice medicine to lower the risks of lawsuits. Changes include more extensive record keeping, more diagnostic tests and treatment procedures, and longer and more frequent visits with patients.

The effect of rising malpractice insurance costs, along with other factors, on what the public pays for medical services is reflected by the government's consumer price index (see pages 54 and 55), which shows that medical care costs and the costs of hospital rooms and physicians' fees all have risen at a considerably faster pace than the overall cost of living in each year since 1980.

One notable aspect of the medical malpractice crisis has been its impact on obstetrics, a high-risk specialty where premiums are especially high. A survey by the American College of Obstetricians and Gynecologists shows that one out of eight physicians specializing in pregnancy care has stopped

delivering babies due to the threat of malpractice suits. The chairman of the college's committee on professional liability predicted early in 1988 that there will be more physicians leaving obstetrics at the height of their professional ability. Previous studies have shown that this trend hits rural areas hardest, and reports from various states confirm the shortage.

To help reduce the number and size of medical malpractice claims and thus stem the spiralling increases in medical malpractice insurance costs, the insurance industry has joined forces with the medical community to promote various reforms of the tort system.

Legislation designed to deal with the malpractice insurance problem, along with other liability insurance concerns, has been passed or is being considered in almost all states (see also The Civil Justice System, pages 61–67). Earlier, in the 1970s, every state except West Virginia had enacted reform laws in the wake of an aggressive campaign by physicians to reform state laws governing medical malpractice lawsuits.

An extensive reform bill enacted into law in Florida in February 1988 includes an arbitration system to keep claims out of court; a $250,000 cap on pain and suffering damages if both parties agree to arbitration, or $350,000 if the plaintiff elects to go to trial; stronger measures against repeat malpractice offenders, and immunity for physicians providing emergency treatment for non-patients. Those provisions are in effect with another feature, a no-fault compensation plan for babies who are brain-damaged at birth, to become effective Jan. 1, 1989.

Courts are being asked to rule on various aspects of tort reform. Late in 1987, a federal judge refused to change his previous decision that Virginia's statutory cap on malpractice awards is unconstitutional, and in January 1988 a state court struck down a provision of a Kansas reform bill that placed caps on jury awards in medical malpractice cases. However, a California reform law that sets a $250,000 limit on the amount of damages a malpractice victim can receive for pain and suffering remains in force following the U.S. Supreme Court's refusal in November 1987 to hear a case challenging the law.

The medical malpractice crisis has been attributed in part to failure of state and federal agencies to take action against incompetent physicians and to determine whether physicians practicing in one state have been disciplined in others. Studies suggest that peer review is not utilized enough in some parts of the United States, and that many state licensing boards have been loath to put bad doctors out of business because they fear being sued by doctors whose skills they challenge.

However, a federal law which took effect in November 1987 requires the suing doctor to pay a licensing board's legal expenses if the board can be shown to have acted in good faith.

A campaign to find solutions to an insurance liability crisis—the rising cost of liability insurance and, in some cases, the difficulty of obtaining it—is showing modest results in the form of at least some tort reform legislation in a majority of the states.

Insurance industry trade associations and members of the business community throughout the United States continue to press for further tort reforms to correct inequities in the civil justice system which are impacting not only on the cost of insurance but, indirectly, on the public's pocketbook.

Their agenda for change is focused on four key areas: abolition of joint and several liability; modification of the collateral source rule; reinstitution of the state-of-the-art defense, and limitations on punitive damages. (See Explanation of Tort Reform Provisions on pages 64 and 65 for definitions of terms.)

Well over half the states enacted major tort reform legislation in 1986 and 1987 (see chart on pages 66 and 67) dealing with at least one of those points or imposing a cap on noneconomic damages. Additional states have either passed or were considering tort reform measures in 1988.

The extent of the problem is reflected in some degree by data from individual states which show that the number of lawsuits has increased in some states and that where the number has remained about the same or dropped, the size of awards generally has risen. In federal courts, the number of civil filings nearly tripled in the period 1970–1986, rising from 87,300 to 254,000, according to Bureau of Justice statistics.

Jury Verdict Research, Inc., an independent statistical analysis company, reported that in 1986 the average size of all personal injury awards increased 12.7 percent from 1985, the highest annual rate since a 15 percent rise in 1982. The research firm said the number of million-dollar personal injury awards in the United States annually soared 31 percent on average from 1980 to 1985 before dropping in 1986 to 397 from 441 in the previous year.

Preliminary results of a study released in October 1987 by the Florida Academic Task Force for Review of the Insurance and Tort Systems showed the average amount of paid claims for general liability lines has increased at an annual rate of 14.4 percent since 1981, far in excess of inflation.

In March 1987, the Antitrust Division of the Justice Department said it had found a direct link between tort reform and insurance availability and affordability. The report cited evidence that "unanticipated changes in the manner in which tort liability has been established and damages assessed, along with the uncertainty engendered by these changes, are directly responsible for the current affordability problems in property/casualty insurance."

Public Perceptions and Opinions

The public's perception of the impact of the rising number and cost of personal injury suits is demonstrated by the findings of a 1987 countrywide survey conducted for the All-Industry Research Council by the Roper Organization. Of the 1,486 respondents, 77 percent said the cost of products and services will go up to pay for injury lawsuits. A majority said that taxes will rise to pay for lawsuits and that products would be pulled off the market because of inflation fears.

Many public opinion surveys indicate that substantial segments of the American public favor radical change of the civil justice system, and many trade groups and broad-based coalitions across the nation are working for tort reform. Among the largest and most influential of these is the American Tort Reform Association (ATRA), whose efforts are endorsed by 140 trade associations and other national organizations representing thousands of companies and a broad spectrum of the professional and business communities. In addition, ATRA is supported by the Boy Scouts of America, Road Runners Clubs of America and other diverse groups.

Tort reform coalitions currently are focusing on improving court procedures and fighting rollbacks of recent legislation. At a November 1987 symposium, James Coyne, president of ATRA, said the playing field was shifting to the courts and noted that state legislatures are increasingly willing to monitor the judiciary. Another speaker added, "Tort reform issues began in the courts and that's where the issue may ultimately be decided."

The results of a nationwide Harris poll released in mid-1986 showed that a 69–24 percent majority of the public think it is too easy for people to sue for damages, 63–12 percent believe the size of most cash settlements has been excessive, and 80 percent say lawyers looking for big contingency fees is one of the causes of the sharp rise in the number of liability cases brought to court. The findings of an insurance company-sponsored Harris poll early in 1987 were similar, and still other surveys support the results.

A survey conducted for the Insurance Information Institute by Cambridge Reports, Inc., found that 85 percent of Americans favor limits on attorneys' fees, 55 percent would limit awards in general, and 63 percent would limit awards for pain and suffering. Nearly half would support mandatory arbitration of liability cases.

Progress and Setbacks

Two states enacted major tort reform legislation early in 1988 and at least four others had tort reform measures on their legislative agendas. In South Carolina, Governor Carroll Campbell signed a bill in April which tightens the evidence standards for punitive damage awards; requires persons who bring lawsuits that are found to be frivolous to pay all legal fees; allows judges to divide jury awards equally among multiple defendants, and shortens the statute of limitations for lawsuits to within three years of an offense from the former six-year limitation.

Also in April, Kentucky passed measures which would allow juries to consider other payments (collateral sources) of compensation to injured claimants; tighten standards of evidence for punitive damages; modify the doctrine of joint and several liability; crack down on frivolous lawsuits; and allow judges to adjust the amount of liability awards.

Successful challenges of tort reform measures have centered primarily on the validity of limitations on damages. In a 1987 ruling on an appeal by 280 insurance companies and three national trade associations, Florida's Supreme Court upheld most of the state's Tort Reform and Insurance Act of 1986, but found a $450,000 cap on noneconomic damages unconstitutional. In February 1988, a Superior Court judge in the state of Washington ruled that state legislators infringed on citizens' rights to jury trials when they placed a ceiling on noneconomic damages.

Caps on damages have also been held invalid by a District Court judge in Colorado and by a federal district judge in Virginia. In Montana, the state Supreme Court in 1987 voted to invalidate a constitutional initiative which would have allowed the legislature to place limits on liability.

On the other hand, the California Supreme Court in April 1988 unanimously upheld the constitutionality of Proposition 51, an initiative passed by voters in 1986 to limit the amount of noneconomic damages any defendant must pay to the proportion of the defendant's fault. In July 1987, the Kansas Supreme Court struck down a portion of a medical malpractice reform bill that allowed juries to be informed of other compensation received by a plaintiff, but appeared to leave intact other provisions in the law, including a $250,000 ceiling on noneconomic damages.

In May 1988, the U.S. Supreme Court sidestepped the issue of whether states may impose large punitive damages on those who unsuccessfully appeal jury awards. The case involved punitive damages of $1.6 million for an insurer's failure to pay a disputed $20,000 claim, plus a $243 fine imposed by Alabama for the fruitless appeal of that judgment. A divided court ruled that the fine was permissible, but declined to rule on the constitutionality of the punitive damage award because that subject had not been considered by the Alabama courts. Thus, the door was left open for the court to hear future arguments on the constitutionality question.

Alternative Dispute Resolution Programs

The cost of bringing a lawsuit and the time often involved in disposing of it have stimulated growing interest in alternatives to resolving disputes through the traditional judicial process. These alternative dispute resolution programs (ADRs), together with the legislative measures that have been enacted in many states and that are being considered by others, are expected to produce significant benefits. These include a reduction in the cost of getting compensation monies into the hands of plaintiffs, a better balance between the rights of plaintiffs and the rights of defendants, and an environ-

ment in which businesses and their insurers can more easily predict future liabilities.

A steadily increasing number of legal experts in insurance companies and in the business community at large believe that in certain cases disagreements among parties can be settled as effectively, and at a lower cost in time and money, through ADRs, which are based on arbitration or negotiation. There are now some 350 ADR programs operating in 46 states, and 25 states have enacted legislation to encourage the use of ADR techniques.

According to Arbitration Forums, Inc., a nonprofit arbitration organization, there was a 9 percent increase in arbitrated claims in 1987. The number of cases, nearly 250,000, represented $500 million in claims.

A survey by a New York law firm found that one-third of Fortune 1000 companies use some form of ADR. According to the findings, companies using ADRs dispose of 6.8 percent of their cases in this way, but those cases represent 20 percent of their dollar exposure. A minitrial—a non-binding trial before key executives from both sides and a neutral adviser—is the most popular alternative.

The chart on pages 66 and 67 summarizes tort reform legislation enacted by the various states. An explanation of the terms which appear as column headings in the chart follows.

Explanation of Tort Reform Provisions

Joint & Several Liability: A rule under which defendants only minimally responsible for any injury may be required to pay the full amount of the damages. Reform measures may completely eliminate this rule or modify it. Modification may limit the rule's application in some way. For example, many states now forbid application of the rule to noneconomic damages, such as pain and suffering. The measure may apply to all tort actions or only to one specific type of case, such as medical malpractice, or may exclude one or more key areas in which joint and several liability is frequently applied, such as auto, pollution and medical malpractice cases.

Punitive Damages: Originally designed to punish defendants who showed a wanton disregard for safety, punitive damage awards no longer are limited to such cases and may exceed substantially the amount of compensatory damages awarded. Reform measures may require punitive damage awards to be paid to the state; set limits on the amount that may be awarded or the amount that may be awarded relative to the amount of compensatory damages; limit the type of case in which they may be awarded, or require hearings to establish a case for punitive damages before they may be sought in court.

Periodic Payments: In most cases, unless otherwise agreed upon by the litigants or mandated by court, judgments may be only lump sum awards. Under a periodic payment system, payments are made over the lifetime of the plaintiff or for the period of disability. Periodic payments are most frequently permitted or required in cases where damages exceed a certain amount.

Contingent Fees: The most common arrangement for payment of plaintiffs' attorneys in liability cases is the "contingency fee." Under this arrangement, the attorney receives as a fee an agreed-upon percentage (commonly 30 percent to 50 percent) of any final award or settlement made to the plaintiff. Reform legislation has taken different approaches: a sliding scale in terms of a percentage of the award; court approval of what is considered a reasonable fee; limiting attorneys' fees to a certain percentage of the amount actually recovered by the plaintiff, or court approval of fees over a certain amount.

Frivolous Suit Penalties: Refers to measures designed to deter pursuit of frivolous claims and the raising of frivolous defenses. These laws generally provide that where a party is found to have acted frivolously in bringing a suit or raising a defense, that party may be found liable for payment of the other party's reasonable attorney and expert witness fees and court costs. Usually, such costs are paid by the party who incurs them.

Collateral Source Rule: Refers to a rule of evidence that bars the introduction of any information indicating a person has been compensated or reimbursed by any source other than the defendant. Approaches taken by modifying legislation include: permitting consideration of compensation or payments received from some or all collateral sources; requiring that any award be offset by the amount of collateral source payments, and allowing the defendant to introduce evidence of compensation to the plaintiff from collateral sources. The jury is instructed to reduce any award for economic loss accordingly.

Government Liability: Reform measures for governments limit the liability of these entities in some way. Generally, the provisions limit or eliminate liability for government or citizen boards, government employees and officials, or certain groups under contract to the government entity. Other measures restrict the application of joint and several liability cases involving local governments.

Dram Shop Liability: Measures generally limit liability of sellers of liquor or put a ceiling on damages in dram shop actions. Reform measures generally limit liability to specific circumstances. For example, some require proof that a provider or seller of alcohol knew that the drinker was visibly drunk when served and that the intoxication was the cause of the death or the injury resulting in the lawsuit. Others remove liability from servers of alcohol unless they provide liquor illegally. Some states have capped awards assessed against liquor servers.

Noneconomic Damages Cap: In some states, laws limit the liability of defendants in liability suits in one of several ways: by limiting recovery of a particular type of damages (usually noneconomic damages such as pain and suffering); by limiting the total amount of damages recoverable, or by placing an absolute cap on liability. Reform measures may apply to all tort suits or only to specific types.

State-of-the-Art Defense (not included in chart, but see page 61): Allows a defendant manufacturer to show that it manufactured its products in accordance with the state of scientific or technological knowledge at the time of manufacture or in compliance with government or industry safety standards.

Major Tort Reform Measures Enacted by State, 1986 through September 1, 1988

State	Joint & several liability	Punitive damages	Periodic payments	Contingent fees	Frivolous suits & defenses	Collateral source rule	Government liability	Dram shop liability
Ala.		X	X		X	X		
Alaska	X[1]	X	X			X		
Ariz.	X						X	X
Ark.							X	
Calif.	X	X	X[2]		X[3]	X[4]	X	X
Colo.	X	X	M	X	X	X	X	X
Conn.	X[5]		X	X	X	X	X	
Del.								
D.C.								
Fla.	X[6]	X	X		X	X		
Ga.	X	X[8,9]			X	X	X	X
Hawaii[7]	X	X		X	X	X	X	
Idaho	X	X	X					X
Ill.	X	X			X	X	X	
Ind.					X	X	X	X
Iowa		X	X		X	X	X	X
Kans.		X	M	M		X	X	
Ky.	X	X			X	X		X
La.	X				X			X
Maine			M	M			X	X
Md.			X			M	X	
Mass.			M	M		M		
Mich.	X		X		X	X	X	X
Minn.		X			X	X	X	
Miss.					X		X	X
Mo.	X	X	M			X		
Mont.[10]	X	X	X[11]			X	X	
Neb.					X		X	
Nev.	X[12]							
N.H.		X		X	X		X	X
N.J.	X				X	X		X
N.M.	X			WC				X
N.Y.	X		X		X	X	X	
N.C.					Y			
N.D.	X	X	X		X	X	X	X[13]
Ohio	X	X	X	X	X		X	
Okla.		X			X			
Ore.	X	X		X	X	X	X	x
Pa.								
R.I.			X		X	M	X	
S.C.	X	X			X		X	
S.D.	X	X	X				X	
Tenn.						X	X	X
Texas	X	X			X		X	X
Utah	X		M		X		X	X
Vt.								X
Va.		X			X		X	
Wash.	X		X	X[14]	X		WC	X
W. Va.	M				M		X	
Wis.				M				
Wyo.	X				X		X	X

X: Indicates that a tort reform measure was enacted, but is not reflective of the effectiveness or desirability of that reform. M: Applies to medical malpractice only. WC: Applies to workers' compensation.

[1]Initiative on Nov. 8 ballot proposes pure several liability. [2]Only for government entities. [3]Two-year regional pilot program. [4]Only public entities. [5]Legislation in May 1987 restored joint and several liability to economic damages. [6]For cases with damages exceeding $25,000.

Source: Compiled by Insurance Information Institute, based on data from trade associations and other groups.

Noneconomic damages cap	Remarks	State
$400,000 (M)[15]	D&O reform	Ala.
500,000	No damage cap for badly impaired; nonprofit D&O reform; prejudgment interest principle	Alaska
		Ariz.
	Product liability reform; D&O reform	Ark.
		Calif.
250,000[16]	Nonprofit D&O reform; $1 million cap on all damages	Colo.
	Corporate D&O reform; product liability reform	Conn.
		Del.
350,000(M)[17]	No fault compensation fund for brain-damaged infants	D.C.
		Fla.
	Govt. suits up to insurance coverage only; nonprofit D&O; product liability reform	Ga.
375,000	Arbitration authorized for claims under $150,000	Hawaii
400,000[18]	Nonprofit D&O reform	Idaho
	Product liability reform	Ill.
	Nonprofit D&O reform	Ind.
	Product liability reform	Iowa
250,000[19]	Product liability; D&O reform; general $250,000 cap on noneconomic damages, including medical malpractice	Kan.
		Ky.
	Product liability reform	La.
		Maine
350,000	Nonprofit D&O reform; damages cap excludes punitive damages	Md.
500,000(M)	Exceptions to malpractice cap	Mass.
225,000(M)	Exceptions to malpractice cap; product liability exception to joint and sev. liability measure	Mich.
400,000[20]	Nonprofit D&O reform	Minn.
	Sovereign immunity reinstated	Miss.
350,000(M)	Product liability reform	Mo.
	Product liability reform	Mont.
	Reduced prejudgment interest	Neb.
		Nev.
875,000	Nonprofit D&O reform; state-of-the-art, prevailing knowledge defense allowed in product liability suits	N.H.
		N.J.
[-]	Product liability reform	N.M.
	Nonprofit D&O reform	N.Y.
	Nonprofit D&O reform; some exceptions to joint and several measure	N.C.
		N.D.
	Product liability reform	Ohio
	Periodic payments allowed for $250,000 judgments	Okla.
	Prejudgment interest rate lowered	Ore.
500,000	Product liability reform; punitive damages	Pa.
		R.I.
		S.C.
1,000,000(M)[21]		S.D.
	Nonprofit D&O reform	Tenn.
	Product liability reform	Texas
250,000(M)	Damages cap excludes punitive damages	Utah
		Vt.
	Tort claims act extended to transportation districts; D&O reform; compensation fund for severely brain-damaged infants	Va.
X	Damage caps based on life expectancy and wages	
1,000,000(M)		Wash.
1,000,000(M)		W.Va.
		Wis.
	Nonprofit D&O reform	Wyo.

[15]Some measures subject to sunset 1989. [16]May be awarded only once for each act or omission, regardless of the number of cases arising from the act or omission. [17]$250,000 cap excludes intentional tort and product liability. [18]Montana Supreme Court ruling may nullify some measures. [19]Optional for judgments over $100,000. [20]Major exceptions. [21]Some measures subject to sunset provisions. [22]Court has right to review legal fees for propriety. [23]Including punitive damages where applicable. [24]Damages up to $500,000 at court's discretion. [25]$250,000 applicable to arbitrated cases. [26]Subject to sunset provisions. [27]Pain and suffering damages only, not applicable to actions based on medical malpractice liability. [28]Excludes pain and suffering, disability or disfigurement. [29]Includes economic damages.

Insurance in Home Ownership

The cost of insurance represents just 3 percent of the monthly housing expenses faced by home purchasers in the United States, according to a 1987 countrywide study by the U.S. League of Savings Institutions. The study reflected a 6.8 percent increase from 1985 to 1987 in the median monthly housing expense after an 8.6 percent increase from 1983 to 1985 and a 13 percent decrease over the preceding two-year period.

As shown in the table below, the percentage of the total monthly housing expense attributable to the cost of hazard insurance increased only minimally from 1983 to 1985 and again from 1985 to 1987.

Countrywide, the median purchase price of homes increased from $65,000 in 1983 to $95,000 in 1987, and the median downpayment rose from $12,000 to $19,850 over the same period. The League of Savings Institutions said that in each of the three years covered by the study, downpayments amounted to less than 20 percent of the purchase price in more than 50 percent of all purchases. The proportion of buyers who said their monthly housing expense exceeded 25 percent of their household income dropped sharply from 40.4 percent in 1983 to 30.5 percent in 1987.

While homes 25 or more years old continue to be the most popular buys, the percentage of people buying such homes has been declining gradually, with steady corresponding increases in purchases of new homes and condominiums.

With the median age of home buyers ranging from 34.4 years in 1983 to 37 in 1987, possession of a second income in two-adult households apparently played an influential role in the ability or decision to buy. The study showed that between 53 and 57 percent of the time, income contributed by a second earner accounted for 10 percent or more of the total household income.

The study showed about one out of four home purchasers to be unmarried.

The following table summarizes the cost in 1983, 1985 and 1987 of the various items included in overall monthly housing expenses, along with the median purchase price of homes in each year.

Cost of Monthly Housing Expense Items

	1987		1985		1983	
Item	Cost	% of Cost	Cost	% of Cost	Cost	% of Cost
Median purchase price	$95,000		$75,000		$65,000	
Median monthly housing expense	822		770		709	
Mortgage payment	601	73.1%	573	74.4%	524	73.9%
Real estate taxes	96	11.7	75	9.7	65	9.2
Utilities	100	12.2	100	13.0	100	14.1
Hazard insurance	25	3.0	22	2.9	20	2.8

Source: U.S. League of Savings Institutions

Fire Losses

Fire losses in the United States increased only fractionally in 1987, to a record $8.5 billion from the adjusted 1986 total of $8.49 billion. The per capita fire loss dropped to $34.96 from the 1986 figure of $35.21. While the trend of fire losses has been generally upward over the years, the ratio of such losses to the aggregate value of property subject to such losses has been declining for many years as a result of countrywide fire prevention efforts.

U.S. Fire Losses* 1875–1987

Year	Property loss	Loss per capita	Year	Property loss	Loss per capita
1875	$ 78,102,000	$1.73	1970	$2,238,000,000	$11.41
1880	74,643,000	1.49	1980	5,579,000,000	24.56
1890	108,994,000	1.73	1981	5,625,000,000	24.53
1900	160,930,000	2.12	1982	5,894,000,000	25.61
1910	214,003,000	2.32	1983	6,320,000,000	27.20
1920	447,887,000	4.21	1984	7,601,701,000	32.35
1930	501,981,000	4.08	1985	7,752,525,000	32.70
1940	286,491,000	2.16	1986	8,488,000,000	35.21
1950	648,909,000	4.27	1987	8,504,166,000	34.96
1960	1,107,824,000	6.16			

*Including allowances for uninsured and unreported losses.
Source: Insurance Services Office.

Fire Fatalities

Fire deaths in the United States totaled some 4,800 in 1987, 200 fewer than in the preceding year, according to a National Safety Council estimate. The Council said approximately 3,900, or 81 percent, of the victims perished in residential fires.

Highest death rates by fire are among persons 65 years of age and older and among children under 5 years of age. Rates shown below are deaths per 100,000 population in each age group resulting from burns, asphyxiation or being struck by falling objects during fires.

Fire Deaths per 100,000 Population

Ages	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
0–4	5.7	5.2	5.1	5.1	4.5	4.3	4.2	4.0	4.1	4.7
5–14	1.6	1.6	1.4	1.4	1.4	1.2	1.4	1.3	1.2	1.2
15–24	1.3	1.4	1.3	1.2	1.1	1.0	1.1	1.0	0.9	0.8
25–44	1.8	1.6	1.6	1.5	1.4	1.4	1.4	1.3	1.3	1.4
45–64	3.2	3.0	2.8	2.7	2.3	2.2	2.1	2.2	1.9	1.8
65 and over	7.0	6.7	6.5	6.3	5.6	5.4	5.1	5.2	4.3	4.7

Source: National Safety Council.

Leading Causes of Fires

Defects in, or mishandling of, heating equipment is responsible for more residential fires than any other single cause, while arson continues to be far out in front as the leading cause of nonresidential fires.

A report by the United States Fire Administration shows that heating-related ignitions were blamed for about 22 percent of all residential fires in the United States in 1986, the most recent year for which the data were available. Cooking-related incidents were listed as the second leading cause of residential fires and the leading cause of injuries resulting from fires in homes.

As has been the case in previous years, careless smoking was shown to be the leading cause of residential fire fatalities, with involvement in 19.2 percent of all home fire deaths in 1986. Most of the smoking-caused deaths occur at night and involve the ignition of upholstery or bedding.

Arson caused a larger amount of dollar losses in residential fires than any other single cause.

The U.S. Fire Administration listed arson as the cause in 1986 of about one of every four fires in nonresidential structures, including schools, restaurants, garages and manufacturing plants. In nonresidential fires, arson was also held responsible for 26.9 percent of the dollar losses as well as 20.9 percent of all fatalities and 17.5 percent of all injuries.

A summary of the U.S. Fire Administration's findings as to the leading causes of fires in 1986 appears in the table below.

Causes of Reported Fires, 1986

	Residential				Non-residential			
Cause	Fires	Deaths	Injuries	Dollar loss	Fires	Deaths	Injuries	Dollar loss
Incendiary/Suspicious	11.2%	11.0%	9.6%	18.3%	24.8%	20.9%	17.5%	26.9%
Children Playing	4.2	5.8	9.2	3.9	3.0	3.0	2.2	.5
Smoking	6.4	19.2	13.4	5.8	5.0	15.7	5.6	1.6
Heating	22.0	9.3	10.1	12.7	5.5	5.2	6.8	4.6
Cooking	16.8	6.1	19.5	7.1	5.5	2.2	6.5	2.0
Electrical Distribution	7.2	8.8	5.4	10.3	8.6	3.0	9.4	8.5
Appliances, A/C	5.7	2.5	4.7	5.7	4.4	3.7	4.7	1.9
Open Flame, Ember, Torch	5.0	2.7	5.6	4.3	8.7	4.5	12.5	4.5
Other Heat, Spark	1.3	1.9	1.8	1.4	1.6	3.7	2.7	1.4
Other Equipment	7.3	3.8	6.7	6.3	9.4	6.7	17.2	10.1
Natural Causes	1.6	.1	.7	1.8	2.8	2.2	3.4	2.6
Exposure	2.7	.5	.9	2.7	5.1	.7	.9	3.6
Unknown	8.5	28.3	12.3	19.6	15.5	28.4	10.4	31.9

Note: Columns of figures may not add to 100 percent because of the effects of rounding.
Source: U.S. Fire Administration, Federal Emergency Management Agency

Arson

Arson—the intentional setting of a fire—has been called the worst man-made disaster in America. Each year in the United States, incendiary or suspicious fires take hundreds of lives and cause property damage well in excess of a billion dollars.

Data from the Federal Bureau of Investigation and the National Fire Protection Association (NFPA) suggest that a continuing campaign to reduce the incidence of arson has been at least moderately successful in recent years.

The NFPA said the estimated number of structural fires of incendiary or suspicious origin declined by 5.4 percent in 1987 after a drop of 5.1 percent in 1986. The estimated 105,000 such fires in 1987 resulted in dollar losses of $1.59 billion, down 5.2 percent from the 1986 figure.

The FBI said the number of arson offenses on which it had complete reports (fewer than the number reported by the NFPA), declined by 4 percent in 1987 and that dollar losses were down by 24 percent.

The NFPA report for 1987 said that 730 civilians lost their lives in incendiary or suspicious fires in structures that year, 3.6 percent more than in 1986. The NFPA also reported a 10.5 percent drop in vehicular fires of incendiary or suspicious origin in 1987.

Studies have indicated that vandalism is the most common motive for arson, a conclusion supported by the fact that about one of every four persons arrested for the offense is under age 15. Nearly half of those arrested are under age 20.

The insurance industry for many years has helped to spearhead efforts to combat arson. The Insurance Committee for Arson Control, representing more than 2,000 insurers, serves as a catalyst for the industry's arson efforts and as a liaison with other groups devoted to arson control.

Incendiary and Suspicious Fires in Structures, 1987

	Fires		Civilian deaths		Dollar loss*	
	Estimate	Change from 1986	Estimate	Change from 1986	Estimate	Change from 1986
Structural fires of incendiary origin	65,500	−7.8%	465	− 7.9%	$1,109,000,000	−4.6%
Structural fires of suspicious origin	39,500	−1.3	265	+32.5	481,000,000	−6.6
Totals	105,000	−5.4	730	+ 3.6	1,590,000,000	−5.2

*Includes direct property losses only; does not include indirect losses such as business interruption or temporary shelter costs. No adjustment was made for inflation in the year-to-year comparisons.

Source: National Fire Protection Association estimates.

Structural Fires

Fires in residential structures accounted for 72.8 percent of structural fires in the United States in 1987, according to the National Fire Protection Association (NFPA). Residential fires also accounted for 59.4 percent of the dollar losses from structural fires, estimated by the NFPA at $6.226 billion.

The number of structural fires in 1987, 758,000, represented a decrease of 5.3 percent from the 1986 figure of 800,000. However, the estimated dollar loss total was 6.7 percent higher than the previous year's figure.

The NFPA said 80.2 percent of civilian fire deaths and 72.5 percent of civilian fire injuries occurred in residential fires.

Structural Fires by Type of Use, 1987*

Property use		Estimated number of fires	% Change from 1986	% of structural fires	% of dollar losses**
Public assembly		21,000	− 6.7%	2.8%	4.8%
Educational		11,000	−12.0	1.5	1.5
Institutional		19,000	−11.6	2.5	2.3
Residential		551,500	− 5.2	72.8	59.4
One- and two-family dwellings***	433,000				
Apartments	103,500				
Hotels and motels	8,000				
Other	7,000				
Stores and offices		45,000	—	5.9	10.2
Industry, utility, defense		28,000	−17.7	3.7	9.6
Storage in structures		48,500	+ 5.4	6.4	10.2
Special structures		34,000	− 8.1	4.5	2.1
Totals		758,000	− 5.3		

*Estimates based on data reported to the National Fire Protection Association by fire departments responding to the 1987 National Fire Experience Survey.
**Direct property losses only.
***Includes mobile homes.

Source: National Fire Protection Association estimates.

Civilian Fire Deaths and Injuries by Property Use, 1987

Property use		Deaths	% Change from 1986	% of All civilian fire deaths	Civilian fire injuries
Residential		4,660	− 2.3%	80.2%	20,440
One- and two-family dwellings*	3,780		− 5.6	65.0	15,200
Apartments	790		+21.5	13.6	4,765
Hotels and motels	50		—	.9	300
Other residential	40		−38.5	.7	175
Non-residential structures		220	+ 2.3	3.8	3,375
Highway vehicles		755	−13.5	13.0	2,900
Other vehicles**		50	−28.6	.9	250
All other categories		125	− 3.9	2.1	1,250
Totals		5,810	− 0.7	100.0	28,215

*Includes mobile homes.
**Includes trains, boats, ships, aircraft, farm vehicles and construction vehicles.

Source: National Fire Protection Association estimates.

Multiple-Death Fires

Twelve persons died in the nation's most tragic multiple-death fire of 1987, a blaze which swept through a single-family dwelling in Milwaukee, Wis., on September 30.

Seven or more persons perished in each of five other fires during the year, according to the National Fire Protection Association (NFPA).

Altogether, in 1987, there were 60 fires in which at least five persons were killed, the NFPA said. Thirty-seven of those multiple-death fires were in residences and 23 were in other kinds of structures.

Historically, there have been 24 fires in the United States in which 100 or more persons have perished, including three—in a steamship fire in the lower Mississippi River in 1865, in Peshtigo, Wis., in 1871 and in New York City in 1904—which claimed more than 1,000 lives each. The most tragic multiple-death fire since 1970 occurred on May 28, 1977, when 165 persons died in a supper club fire in Southgate, Ky..

As shown in the second table below, of the nation's 10 worst multiple-death fires, the most recent occurred more than 40 years ago when 468 persons lost their lives in Texas City, Texas in 1947

The Most Tragic Multiple-Death Fires of 1987

Date	Location	Property use	Deaths
Sept. 30	Milwaukee, Wis.	Single-family dwelling	12
Oct. 20	Indianapolis, Ind.	Airport hotel	9
Apr. 20	Camden, N.J.	Single-family dwelling	8
Jan. 6	Chicago, Ill.	Apartment house	7
Mar. 22	New York, N.Y.	High rise apartment building	7
May 22	Chicago, Ill.	Apartment house	7

Source: National Fire Protection Association

The 10 Worst Multiple-Death Fires in the United States

Date	Place	Deaths
April 27, 1865	Lower Mississippi River, SS Saltana	1,547
Oct. 8, 1871	Peshtigo, Wis., and environs	1,152
June 15, 1904	New York, N.Y., SS General Slocum	1,030
Dec. 30, 1903	Chicago, Ill., Iroquois Theater	602
Oct. 12, 1918	Cloquet, Minn., and environs	559
April 18, 1906	San Francisco, Calif., earthquake-fire	500
Nov. 28, 1942	Boston, Mass., Cocoanut Grove Night Club	492
April 16, 1947	Texas City, Tex., SS Grand and Monsanto Chemical Co.	468
Sept. 1, 1894	Hinckley, Minn., and environs	413
June 30, 1900	Hoboken, N.J., North German Lloyd Steamship pier and ships	326

Source: Compiled by the Insurance Information Institute

Large-Loss Fires

Twenty-seven fires which caused property damage of $5 million or more each accounted for some 4.8 percent of the nation's total fire damage in 1986, according to the National Fire Protection Association (NFPA). The year's most costly loss resulted from an accidental explosion at an electric generating plant in Bismarck, N.D., in November, causing property damage of $50 million.

The NFPA reported 352 large-loss fires (those which cause direct fire damage of $1 million or more each) in 1986. The number of such fires was down 5 percent from the 1985 total, and the resulting dollar losses were 2.9 percent lower than those of 1985. The NFPA described the improvement as particularly noteworthy because inflation tends to define an increasing number of fires as large-loss fires each year.

The Association said the large-loss fires represented just .02 percent of all fires reported to fire departments in the United States during 1986, but accounted for about 13.4 percent of the total dollar loss attributed to fires in that year.

Beginning with the great Chicago fire of 1871, in which more than 17,000 buildings were destroyed, at least 21 fires in the United States have caused property damage of $50 million or more (see table on the next page). Twelve of those fires, including four in which the damage was estimated at $100 million or more, have occurred during the 1980s.

U.S. Fires Causing Property Damage of $5 Million or More, 1986

Date	Place	Property use	Estimated loss
Nov. 17	Bismarck, N.D.	Electric generating plant	$50,000,000
Aug. 10	Chicago, Ill.	Commercial aircraft	30,000,000
Feb. 3	Harrisburg, Pa.	Metal product manufacturing plant	30,000,000
Apr. 29	Los Angeles, Calif.	Library	22,000,000
Jan. 26	Mifflinton, Pa.	Slaughterhouse meat-packing plant	20,000,000
Jan. 10	Frederick, Okla.	Baled cotton storage	12,600,000
Apr. 6	Prudhoe Bay, Alaska	Storage property	12,000,000
Nov. 29	Washington Court, Ohio	Industrial chemical manufacture	11,850,000
July 3	Austin, Minn.	Junior high school	11,000,000
July 2	Milford, Iowa	Flammable, combustible liquid tank storage	10,000,000
May 5	Hemstead, N.C.	Forest fire	10,000,000
Nov. 4	Baltimore, Md.	General warehouse	10,000,000
May 10	Athens, Ala.	Nuclear plant	9,500,000
Jan. 28	Portland, Ark.	Baled cotton storage	8,500,000
Sept. 23	Anderson, S.C.	Plastic manufacture	7,250,000
Sept. 23	Fruitland, Md.	Paper, paper products storage	7,000,000
July 19	Tampa, Fla.	Electrical equipment manufacture	7,000,000
Mar. 6	Los Angeles, Calif.	Petroleum refinery, natural gas plant	6,000,000
Mar. 25	Westfield, Mass.	Machinery manufacture	6,000,000
May 26	Kearney, N.J.	Nonferrous metal manufacture	6,000,000
Sept. 5	Fort Lauderdale, Fla.	Industrial chemical storage	5,710,000
June 8	Mansfield, Mass.	Cloth, yarn storage	5,275,000
Apr. 30	Miami, Fla.	Boat, ship storage	5,200,000
Feb. 27	West New York, N.J.	Restaurant	5,000,000
Apr. 1	Seymour, Conn.	Nonferrous metal manufacture	5,000,000
July 1	Springfield, Md.	General warehouse	5,000,000
July 7	Pascagoula, Miss.	Flammable liquid or gas loading and unloading facilty	5,000,000

Source: National Fire Protection Association

In terms of prevailing values, the most costly fire in the United States occurred in Passaic, N.J., on Sept. 2, 1985, with damage to residential and industrial properties estimated at some $400 million. The fire involved more than 18 acres of residential properties, destroyed 14 dwellings and 18 industrial buildings, and left more than 300 persons homeless and 2,200 unemployed. Property losses resulting from the San Francisco fire of 1906 (exclusive of heavy earthquake damage) were put at $350 million, but in terms of 1987 dollars that figure would be an estimated $4.1 billion.

The Most Costly Fires in the United States

Date	Place	Property destroyed	Estimated loss
Sept. 2, 1985	Passaic, N.J.	18 industrial buildings, 14 dwellings	$400,000,000
April 18, 1906	San Francisco, Calif.	28,000 buildings	350,000,000
Oct. 8-10, 1871	Chicago, Ill.	17,340 buildings	175,000,000
Nov. 12, 1984	Tinker AFB, Okla.	Jet engine repair facility	138,000,000
Feb. 21, 1985	Elizabeth, N.J.	Aerosol products warehouse	123,000,000
July 23, 1984	Romeoville, Ill.	Oil refinery	100,000,000
June 6, 1982	Falls Township, Pa.	Retail distribution center	100,000,000
Nov. 25, 1982	Minneapolis, Minn.	Bank building	91,000,000
July 1, 1985	Camarillo, Calif.	Wild land, 118,000 acres	75,403,000
Nov. 9, 1872	Boston, Mass.	776 buildings	75,000,000
Sept. 1, 1979	Deer Park, Texas	Tank ship	70,000,000
Nov. 28, 1981	Lynn, Mass.	31 buildings	70,000,000
July 31, 1985	Arlington Heights, Ill.	Racetrack grandstand	70,000,000
Apr. 16, 1947	Texas City, Texas	Waterfront industrial area	67,000,000
Feb. 27, 1975	New York, N.Y.	Telephone central office	56,500,000
Feb. 7, 1904	Baltimore, Md.	80 city blocks in business section	50,000,000
Aug. 12, 1953	Livonia, Mich.	Auto transmission plant	50,000,000
Dec. 5, 1970	Linden, N.J.	Oil refinery, nearby buildings	50,000,000
Jan. 20, 1980	Borger, Texas	Refinery	50,000,000
Nov. 21, 1980	Las Vegas, Nev.	Hotel	50,000,000
Apr. 21, 1982	Anaheim, Calif.	51 buildings	50,000,000
Nov. 17, 1986	Bismarck, N.D.	Electric generating plant	50,000,000

Source: Compiled by the Insurance Information Institute.

Civil Disorders

Rioting which exploded in Miami, Fla., in May 1980 resulted in the most costly insured losses on record growing out of civil disorders. Of the 10 most costly civil disorders, all but the Miami violence and a disturbance in New York City, which occurred during a widespread power outage, occurred in the 1960s.

The 10 Most Costly U.S. Civil Disorders

Date	Locale	Estimated insured loss
May 17-19, 1980	Miami	$65,250,000
Aug. 11-17, 1965	Los Angeles (Watts Section)	44,000,000
July 23, 1967	Detroit	41,500,000
July 13-14, 1977	New York City	28,000,000
April 4-9, 1968	Washington, D.C.	24,000,000
July 12, 1967	Newark	15,000,000
April 6-9, 1968	Baltimore	14,000,000
April 4-11, 1968	Chicago	13,000,000
April 4-11, 1968	New York City	4,200,000
April 4-11, 1968	Pittsburgh	2,000,000

Source: Compiled by the Insurance Information Institute.

The Catastrophe Record, 1987

Violent windstorms, together with one earthquake, resulted in insured catastrophe losses of some $905,000,000 in the United States during 1987. The estimated property loss total was about 4 percent higher than the 1986 figure of $871,516,250.

A catastrophe, in the language of the insurance industry, is an exceptionally severe loss, most often the result of a windstorm, freezing or some other nature-related cause. Damage from a fire or an explosion also can reach catastrophic proportions. As a rule of thumb, an event is designated a catastrophe when the insured loss appears likely to exceed $5 million.

Prior to 1986, insured catastrophe losses had been counted at well in excess of $1 billion in each of four consecutive years, with the total reaching an all-time high of $2.82 billion in 1985. The absence of heavily destructive hurricanes (two of which resulted in insured property damage of more than $962 million in 1985) helped hold catastrophe losses below the billion dollar mark in each of the last two years.

During 1987, a total of 24 catastrophes affected portions of 27 states. The most costly occurred in mid-August—a severe windstorm that left $150 million of insured destruction in Illinois. In December, a storm which battered areas of nine states from the Midwest to New Mexico caused insured property losses of some $115 million.

Texas was affected by the most catastrophes of any state—seven. Colorado, Kansas and Louisiana each experienced four catastrophic incidents.

The estimates that follow are based on data compiled by the Property Claim Services Division of the American Insurance Services Group, Inc. They cover insured losses only, not total property damage.

The Catastrophe Record, 1987

Date	States	Catastrophe	Estimated loss payment
Jan. 28–29	Colo.	Wind	$ 10,000,000
Feb. 27–Mar. 1	Texas, Okla., La., Miss.	Wind, hail, tornadoes, flooding	36,500,000
Mar. 16–18	Texas, La., Miss., Ala.	Wind, hail, tornadoes	40,000,000
June 17	Kan.	Wind, hail, tornadoes	25,000,000
June 23–24	Colo., Texas	Wind, hail, tornadoes	55,000,000
July 4–5	Colo., Kansas	Wind, hail, tornadoes	20,000,000
July 6	Mo., Ill., Ind., Ky., Va.	Wind, hail, tornadoes, flooding	40,000,000
July 14	Texas	Wind, hail, tornadoes, flooding	15,000,000
July 21	Utah	Wind, hail, flooding	10,000,000
July 23–24	Minn., Wis.	Wind, hail, tornadoes, flooding	58,000,000
July 26	N.J.	Wind, tornadoes	10,000,000
Aug. 3–4	Wy., Colo., Neb.	Wind, hail, flooding	40,000,000
Aug. 13–15	Ill.	Wind, hail, flooding	150,000,000
Aug. 17–18	Neb., Kan.	Wind, hail, tornadoes, flooding	35,000,000
Aug. 19–20	Kan., Mo.	Wind, hail, tornadoes	42,500,000
Sept. 7	Texas	Wind, hail	20,000,000
Oct. 1	Calif.	Earthquake, fire	30,000,000
Oct. 4	N.Y., Conn., Mass.	Wind, snow	15,000,000
Oct. 29	Ariz.	Wind, hail, flooding	20,000,000
Nov. 15–16	Texas, La., Miss.	Wind, hail, tornadoes, flooding [1]	63,000,000
Dec. 12–13	Calif.	Wind	25,000,000
Dec. 13–16	N.M., Texas, La., Ark., Tenn., Ky., Ill., Ind., Ohio	Wind, hail, tornadoes, snow, ice	115,000,000
Dec. 15–17	Calif.	Wind, snow, ice, freezing	10,000,000
Dec. 24–26	Okla., Mo., Ark., Tenn.	Wind, snow, ice, freezing, flooding	20,000,000

Source: Property Claim Services Division, American Insurance Services Group, Inc.

Catastrophes during the Last Decade

During the last 10 years, 355 catastrophes have resulted in insured property losses totaling more than $14.1 billion. Twice during that period, annual losses have exceeded $2 billion, and in four other years losses have exceeded $1 billion.

Six of the nation's 10 most costly hurricanes (see page 79) have occurred during that 10-year period. Those six storms alone have accounted for about 19 percent of the insured dollar losses attributed to catastrophes over that time span.

Only 20 of the 355 catastrophic occurrences have been attributable to other than natural causes—fires, explosions, etc.

The following table summarizes the catastrophe record during the 10-year period from 1978 through 1987.

The Catastrophe Record, 1978–1987

Year	Number of catastrophes			Largest single loss	Total estimated loss payments
	Natural	Other	Total		
1978	37	4	41	$ 79,000,000	$ 652,813,900
1979	50	4	54	752,510,000	1,684,570,550
1980	46	5	51	100,000,000	1,177,022,900
1981	30	3	33	201,546,780	714,228,780
1982	30	3	33	243,500,000	1,528,419,000
1983	33	0	33	880,000,000	2,254,745,000
1984	26	0	26	276,700,000	1,548,257,500
1985	33	1	34	543,304,000	2,816,340,000
1986	26	0	26	82,000,000	871,516,250
1987	24	0	24	150,000,000	905,000,000
Total	335	20	355	N.A.*	$14,152,913,880

*Not applicable.
Compiled by Insurance Information Institute.

Catastrophes Worldwide

A study by the Swiss Reinsurance Company determined that in 1987, 292 major losses and catastrophes caused 17,500 deaths and more than $5.3 billion of insured property damage throughout the world. The figures compared with 1986 totals of 215 occurrences, 17,513 fatalities and $3.1 billion of insured property damage.

The study took into account natural catastrophes (such as severe windstorms, snowstorms, landslides, floods and earthquakes), as well as major fires, aviation accidents and accidents caused by waterborne and road or rail traffic. For inclusion in the study, whose findings were related in Sigma, a Swiss Re publication, a catastrophe was defined as an incident claiming at least 20 lives and insured damage of at least $6.9 million for marine catastrophes; $13.9 million for aviation accidents; and $17.4 million for all other types of catastrophes.

Earthquakes in the United States

While much of the nation's seismic activity is centered along the Pacific Coast and in Nevada, every state is vulnerable to and has felt the effect of earthquakes. One of the nation's most tragic catastrophes was the San Francisco earthquake-fire of April 18, 1906, which nearly razed the city and took an estimated 500 lives. In the East, the greatest shock was experienced in Charleston, S.C., on Aug. 31, 1886. The Charleston earthquake caused 60 deaths and $23 million in property damage.

Although insurance against earthquake damage is generally available, relatively few property owners have taken advantage of the protection it offers.

One of the nation's most costly earthquakes struck southern California on October 1, 1987, causing an estimated $358 million of property damage in southern California. The National Oceanic and Atmospheric Administration (NOAA) said eight persons were killed and many injured, about 2,200 persons were left homeless and more than 10,400 buildings were damaged in the Los Angeles-Pasadena-Whittier area. The earthquake also was felt at Las Vegas, Nevada.

On November 24, at least 94 persons were injured in an earthquake which caused an estimated $2.6 million of property damage in the Calexico-El Centro-Westmorland area of southern California. Additional injuries and damage were reported in the Mexicali, Mexico area. Six lesser but significant earthquakes were recorded during the year in the Aleutian Islands, southern Illinois, California and the Gulf of Alaska.

Property damage figures in the table below are given in dollar values for the years in which the earthquakes occurred. NOAA said that in terms of 1981 dollars, the 1964 Alaska earthquake and tsunami (huge sea wave caused by the quake) would show the largest magnitude of $1.19 billion. The San Fernando earthquake of 1971 would rank second at $1.05 billion; the 1906 San Francisco earthquake third at $389.3 million.

The 10 Most Costly U.S. Earthquakes*

Year	Locality	Estimated property damage
1971	San Fernando, Calif.	$553,000,000
1964	Alaska and West Coast of United States (tsunami damage from earthquake near Anchorage, Alaska)	500,000,000
1987	Southern California; primarily in Los Angeles-Pasadena-Whittier area	358,000,000
1952	Kern County, Calif.	60,000,000
1933	Long Beach, Calif.	40,000,000
1983	Central California (Coalinga)	31,000,000
1979	Imperial County, Calif.	30,000,000
1960	Hawaii and West Coast of United States (tsunami damage from earthquake off the coast of Chile)	25,500,000
1946	Hawaii (tsunami damage from earthquake in Aleutians)	25,000,000
1949	Puget Sound, Wash.	25,000,000

*One of history's most catastrophic occurrences, the San Francisco earthquake fire of 1906, caused earthquake damage estimated at $24 million plus fire damage of some $350 million.

Source: National Geophysical Data Center, National Oceanic and Atmospheric Administration.

Hurricanes Reaching the United States

Only one hurricane, "Floyd," reached the U.S. mainland during 1987, and the National Oceanic and Atmospheric Administration (NOAA) described it as a "weak, dissipating hurricane" when it passed over the Florida Keys on Oct. 12. NOAA said "Floyd" caused about $500,000 in property damage.

In the last 25 years, 43 hurricanes have reached the continental United States, causing 775 deaths.

Hurricanes in the United States 1963–1987

Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*
1963	1	11	1972	1	121	1981	0	0
1964	4	49	1973	0	5	1982	0	3
1965	1	75	1974	1	1	1983	2	22
1966	2	54	1975	1	21	1984	5	4
1967	1	18	1976	1	9	1985	6	30
1968	1	9	1977	1	0	1986	4	9
1969	2	256	1978	0	35	1987	1	0
1970	1	11	1979	3	22			
1971	3	8	1980	1	2			

*Deaths include fatalities from high winds of less than hurricane force.

Source: United States Department of Commerce—National Oceanic and Atmospheric Administration.

The 10 Most Costly Insured Hurricanes

Dates	Place	Hurricane	Estimated insured loss
1979–Sept. 12–14	Miss., Ala., Fla., La., Tenn., Ky., W. Va., Ohio, Pa., N.Y.	"Frederic"	$752,510,000
1965–Sept. 7–10	Fla., La., Miss.	"Betsy"	715,000,000*
1983–Aug. 17–20	Texas	"Alicia"	675,520,000
1985–Aug. 30–Sept. 3	Fla., Ala., Miss., La.	"Elena"	543,304,000
1985–Sept. 26–27	N.C., Va., Md., Del., Pa., N.J., N.Y., Conn., R.I., Mass., N.H., Vt., Me.	"Gloria"	418,750,000
1970–Aug. 3	Southeastern Texas	"Celia"	309,950,000*
1969–Aug. 17–18	La., Miss., Ala., Florida Panhandle	"Camille"	225,000,000*
1982–Nov. 23–24	Hawaii	"Iwa"	137,000,000
1954–Aug. 30–31	N.Y., Conn., R.I., Mass., Maine, N.H., N.J.	"Carol"	129,700,000*
1979–Aug. 30, Sept. 4–6	Fla., Ga., S.C., N.C., Va., Md., D.C., Del., Pa., N.J., N.Y., Conn., Mass., P.R., V.I.	"David"	122,070,000

*Fixed property loss.

Source: Compiled by Insurance Information Institute from estimates provided prior to 1984 by the American Insurance Association; from 1984 to date by the Property Claim Services Division of the American Insurance Services Group, Inc.

Tornadoes in the United States

The number of tornadoes striking the United States during 1987 represented the lowest annual total since 1970, primarily because of a paucity of such storms during the spring months of April and May. The National Climatic Data Center said that while the number of tornadoes reached a 17-year low of 656, the number of resulting fatalities rose to 59 from 1986's record-breaking low total of 15.

During the last five years, 3,974 tornadoes have caused 324 deaths in the United States.

Tornadoes in the United States, 1963–1987

Year	Tornadoes	Deaths*	Year	Tornadoes	Deaths*	Year	Tornadoes	Deaths*
1963	464	31	1972	741	27	1981	783	24
1964	704	73	1973	1,102	87	1982	1,046	64
1965	906	299	1974	947	361	1983	931	34
1966	585	98	1975	920	60	1984	907	122
1967	926	114	1976	835	44	1985	684	94
1968	660	131	1977	852	43	1986	762	15
1969	608	66	1978	788	53	1987	656	59
1970	653	72	1979	852	84			
1971	888	156	1980	866	28			

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

Five-Year Totals, Tornadoes by State, 1983–1987

State	Tornadoes	Deaths	Injuries	State	Tornadoes	Deaths	Injuries
Alabama	150	12	208	Montana	16	1	1
Alaska	0	0	0	Nebraska	197	0	42
Arizona	17	0	0	Nevada	12	0	0
Arkansas	54	16	266	New Hampshire	6	0	0
California	25	0	36	New Jersey	13	0	11
Colorado	159	0	14	New Mexico	26	0	0
Connecticut	4	0	0	New York	37	4	39
Delaware	4	2	19	North Carolina	67	45	852
District of Columbia	0	0	0	North Dakota	124	0	3
Florida	248	7	157	Ohio	60	16	435
Georgia	84	0	121	Oklahoma	248	14	287
Hawaii	4	0	0	Oregon	7	0	0
Idaho	26	0	3	Pennsylvania	69	65	560
Illinois	107	4	88	Rhode Island	4	0	20
Indiana	52	1	56	South Carolina	41	15	504
Iowa	197	6	174	South Dakota	180	0	6
Kansas	168	2	57	Tennessee	55	1	80
Kentucky	42	0	44	Texas	627	59	725
Louisiana	154	6	288	Utah	12	0	0
Maine	3	0	0	Vermont	3	0	0
Maryland	7	1	19	Virginia	29	0	21
Massachusetts	9	0	0	Washington	12	0	0
Michigan	102	3	55	West Virginia	3	0	1
Minnesota	112	2	9	Wisconsin	111	16	340
Mississippi	136	21	507	Wyoming	53	0	2
Missouri	98	5	196	Puerto Rico	0	0	0
				Countrywide	3,974*	324	6,237

*Corrected for boundary-crossing tornadoes.

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

Motor Vehicle Accidents

The number of traffic fatalities in the United States, which had declined in five of the last eight years, rose slightly in 1987, according to the National Safety Council. The increase, of less than 1 percent, followed a 5.2 percent rise in traffic deaths in 1986.

Data compiled by the Insurance Information Institute also reflect increases of just under 2 percent in the numbers of accidents and non-fatal injuries.

Despite the rise in traffic deaths over the last two years, the 1987 toll of 48,700 was far short of the toll of 53,524 (not a record) recorded only eight years earlier, in 1979. Credited with contributing to the overall improvement has been the increasing use of seat belts, whose use as of September 1, 1988, was required in 32 states and the District of Columbia (see "Automobile Seat Belt Laws," page 112).

On the other hand, the increases in highway fatalities over the last two years have been attributed in part to increases in average driving speeds and in the number of miles traveled on U.S. roads (up 3.8 percent in 1987).

The economic cost of motor vehicle accidents continued to rise in 1987 because of steady increases in the costs of caring for victims, repairing damage and providing other related services. The estimated economic loss of $85 billion in 1987 was about 6 percent higher than the 1986 estimate of $80 billion.

The economic loss includes property damage, medical costs, lost productivity, the costs of emergency services, legal and court costs and public assistance programs, and insurance administration expenses.

Motor Vehicle Accidents, 1987

Accidents*	33,900,000
Deaths**	48,700
Injuries*	5,400,000
Economic Loss***	$85,000,000,000

* Insurance Information Institute estimate.

** National Safety Council.

*** Insurance Information Institute estimate based on a formula from the National Center for Health Statistics, National Health Survey.

Traffic Deaths, 1978-1987

Year	Deaths	Annual % change	Death rate per 100 million vehicle miles	Ratio of deaths to motor vehicle registrations	Death rate per 10,000 motor vehicles
1978	52,411		3.39	1 to 2,931	3.41
1979	53,524	+ 2.1	3.50	1 to 2,982	3.35
1980	53,172	− 0.7	3.50	1 to 3,039	3.29
1981	51,285	− 3.4	3.30	1 to 3,194	3.13
1982	45,979	−10.9	2.88	1 to 3,609	2.77
1983	44,452	− 2.9	2.68	1 to 3,811	2.62
1984	46,263	+ 4.1	2.69	1 to 3,714	2.69
1985	45,900	− 1.8	2.59	1 to 3,858	2.59
1986	48,300	+ 5.2	2.63	1 to 3,758	2.66
1987	48,700	+ 0.8	2.55	1 to 3,821	2.62

Source: National Safety Council (rate of deaths on registered vehicles computed by Insurance Information Institute).

Motor Vehicle Deaths by State

California had by far the highest traffic fatality toll of any state both in 1986 and 1987. Mileage death rates (deaths per 100 million vehicle miles) ranged from a high of 4.1 in New Mexico to a low of 1.6 in Minnesota.

Motor Vehicle Traffic Deaths by State, 1986–1987

State	Fatalities		Mileage rate*	
	1987	1986	1987	1986
Alabama	1,116	1,086	3.2	3.2
Alaska	76	101	2.0	2.5
Arizona	933	1,002	3.9	4.4
Arkansas	638	603	3.5	3.4
California	5,500	5,222	2.4	2.4
Colorado	590	602	2.3	2.3
Connecticut	451	455	1.8	1.9
Delaware	147	138	2.5	2.4
District of Columbia	56	45	1.7	1.4
Florida	2,891	2,874	3.2	3.3
Georgia	1,604	1,542	2.7	2.7
Hawaii	138	117	1.9	1.7
Idaho	262	258	3.3	3.3
Illinois	1,685	1,617	2.2	2.2
Indiana	1,056	1,038	2.6	2.5
Iowa	491	441	2.3	2.2
Kansas	491	500	2.5	2.5
Kentucky	849	808	2.9	2.8
Louisiana	827	932	2.9	3.1
Maine	228	208	2.1	2.1
Maryland	830	790	2.3	2.2
Massachusetts	690	752	1.7	1.8
Michigan	1,622	1,632	2.2	2.3
Minnesota	530	572	1.6	1.7
Mississippi	757	766	4.0	4.0
Missouri	1,057	1,143	2.5	2.7
Montana	234	222	3.1	2.9
Nebraska	297	290	2.4	2.3
Nevada	262	233	3.0	2.9
New Hampshire	179	172	2.1	2.2
New Jersey	1,023	1,039	1.9	1.9
New Mexico	568	499	4.1	3.8
New York	2,327	2,114	2.4	2.2
North Carolina	1,598	1,645	3.0	3.1
North Dakota	101	100	1.7	1.8
Ohio	1,772	1,673	2.1	2.1
Oklahoma	608	711	1.9	2.3
Oregon	616	619	2.7	2.7
Pennsylvania	1,906	1,926	2.5	2.5
Rhode Island	100	114	1.8	2.1
South Carolina	1,087	1,059	4.0	3.7
South Dakota	134	134	2.2	2.1
Tennessee	1,248	1,230	3.2	3.1
Texas	3,261	3,568	2.3	2.4
Utah	297	313	2.4	2.6
Vermont	120	109	2.4	2.3
Virginia	1,022	1,118	1.9	2.2
Washington	790	714	2.1	2.0
West Virginia	469	437	3.6	3.3
Wisconsin	815	757	2.1	2.0
Wyoming	129	168	2.5	3.1
Total U.S.	48,700	48,300	2.6	2.6

*Deaths per 100,000,000 vehicle miles

Source: National Safety Council

Sex of Drivers

Males comprised about 51.9 percent—some 84.1 million—of the nation's estimated 162 million drivers in 1987. While males were involved as drivers in almost 70 percent more accidents than were females, the National Safety Council attributes the difference at least partly to the amount of driving done by members of each sex and to differences in the times, places and circumstances that the driving is done.

On the basis of the number of miles driven, the accident rate of female drivers dropped sharply in 1987 to reach its lowest point in many years. The accident rate of male drivers also declined in 1987, but failed to attain the record low mark established two years earlier in 1985. In recent years, the accident rate of male drivers—the number of drivers in accidents per 10 million miles driven—generally has been decreasing gradually while that of their female counterparts had been fluctuating for about a decade before turning downward in 1986 and again in 1987.

Male drivers continued in 1987 to compile a much worse fatal accident record than their female counterparts. The National Safety Council data showed that males were involved as drivers in more than three times as many fatal accidents as females and that the involvement rate of male drivers was more than double that of female drivers.

Sex of Drivers Involved in Accidents, 1978–1987

	Drivers in all accidents				Drivers in fatal accidents			
	Male		Female		Male		Female	
Year	Number	Rate*	Number	Rate*	Number	Rate**	Number	Rate**
1978	21,700,000	209	9,800,000	192	51,500	50	15,500	30
1979	20,600,000	202	9,100,000	180	52,700	52	12,500	25
1980	20,100,000	200	9,700,000	192	56,100	56	12,200	24
1981	20,500,000	200	9,500,000	183	53,200	52	11,800	23
1982	20,600,000	198	9,900,000	186	48,800	47	11,500	22
1983	20,400,000	187	10,300,000	184	46,300	43	11,700	21
1984	21,800,000	192	11,200,000	190	47,600	42	13,300	23
1985	21,400,000	185	11,600,000	191	46,900	40	12,700	21
1986	22,100,000	196	12,900,000	177	46,400	41	13,100	18
1987	20,700,000	192	12,300,000	148	45,500	42	13,500	16

*Number of drivers in all accidents per 10,000,000 miles driven.
**Number of drivers in fatal accidents per 1,000,000,000 miles driven.
Source: National Safety Council estimates.

Types and Locations of Auto Accidents

Although some seven out of 10 of the nation's automobile accidents occur in urban locations, nearly two-thirds of the resulting fatalities occur in rural areas. National Safety Council compilations show that in 1987 rural accidents accounted for about 64 percent of all highway fatalities but only 38 percent of non-fatal injuries.

The urban-rural proportions vary considerably for specific types of accidents, however. In 1986, for example, almost 75 percent of all pedestrian fatalities occurred in urban areas, while rural accidents accounted for almost nine of every 10 fatal noncollision accidents and nearly seven out of 10 fatal collisions involving two or more motor vehicles. (See table below.)

Motor Vehicle Accidents by Type and Location, 1987

Type of accident	Fatal accidents			All accidents		
	Total	Urban	Rural	Total	Urban	Rural
Pedestrian	8,200	6,100	2,100	90,000	70,000	20,000
Two-vehicle collision	16,500	5,100	11,400	16,570,000	13,250,000	3,320,000
Angle collision	4,900	1,900	3,000	4,280,000	3,560,000	720,000
Head-on collision	4,900	900	4,000	450,000	290,000	160,000
Rear-end collision	1,600	500	1,100	3,700,000	2,850,000	850,000
Other two-vehicle collision	5,100	1,800	3,300	8,140,000	6,550,000	1,590,000
Other collision total	4,900	2,500	2,400	1,230,000	960,000	270,000
Noncollision	13,700	1,800	11,900	2,910,000	720,000	2,190,000
Totals	43,300	15,500	27,800	20,800,000	15,000,000	5,800,000

Source: National Safety Council

Claim Costs, Auto Accidents

The costs of insurance claim settlements and court awards resulting from auto accidents have risen steadily in recent years. From 1978 through 1987, the average paid bodily injury claim rose 151.3 percent from $3,123 to $7,847; the average paid property damage liability claim climbed approximately 126.7 percent from $622 to $1,410.

Countrywide Average Paid Claim Costs*
Liability Insurance, Private Passenger Cars

Year	Bodily injury	Property damage	Year	Bodily injury	Property damage
1978	$3,123	$622	1983	$5,699	$1,020
1979	3,559	715	1984	6,163	1,125
1980	4,010	787	1985	6,815	1,217
1981	4,453	889	1986	7,396	1,298
1982	5,041	958	1987	7,847	1,410

*For all limits combined and including all loss adjustment expenses. For bodily injury liability, dollar averages exclude Massachusetts (for all years) and most states which have no-fault automobile insurance laws. For property damage liability, dollar averages exclude Massachusetts, Michigan and South Carolina.

Source: Insurance Services Office

Concerted efforts to bring drunk driving under tighter control achieved a new milestone in mid-1988 when Wyoming became the 50th and last state to bar the consumption of alcoholic beverages by persons under age 21. Three other states, Colorado, Ohio and South Dakota, rescinded lower drinking ages for beer, with the result that all states now have a minimum drinking age of 21 for all alcoholic beverages (in a few states, however, the laws do not apply to persons under 21 who already had reached the previous legal drinking age).

In the last few years the insurance industry, citizen groups and government at all levels have stepped up the fight against drunk driving, which the U.S. Department of Transportation (DOT) says caused almost 24,000 deaths in 1986 alone.

With the achievement of the countrywide minimum drinking age of 21, most anti-DWI (driving while intoxicated) activity currently is centered on increasing penalties. In Illinois, a law which became effective January 1, 1988, raised repeat DWI to a felony classification and resulted in jail overcrowding within a few weeks. In South Carolina, a 1988 law entitles insurers to add $600 to a drunk driver's annual auto insurance premium.

Some form of DWI countermeasure legislation has been enacted or introduced in every state, including provisions in all states for license suspensions for first offenders. Other bills include such measures as on-the-spot confiscation of driver licenses if the driver's blood alcohol content exceeds a stipulated level, mandatory jail terms or public service requirements for first offenders, and the banning of "happy hours."

Many states and local police departments have initiated sobriety-check roadblock programs in an effort to curb drunk driving. In 1986, the U.S. Supreme Court affirmed without comment a Virginia Supreme Court decision permitting the use of such roadblocks.

A summary of measures taken by the states to curb drunk driving is contained in the table on the following pages.

It has been estimated that the elimination of even 10 percent of drunk drivers from the highways would result in annual savings of 2,500 lives, 70,000 injuries and more than $1 billion in insurance claims.

Data from the National Highway Traffic Safety Administration's Fatal Accident Reporting System show that the estimated proportion of all people killed in crashes involving at least one driver or pedestrian who had been drinking declined from 57 percent in 1982 to 51 percent in 1985, but rose slightly to 52 percent in 1986.

Insurers have been strong supporters of anti-drunk driving measures, and many auto insurance companies offer discounts and rebates to policyholders who sign agreements not to drink and drive.

Measures by the States to Curb Drunk Driving*

State	Drinking age	1st offense license suspension	Blood alcohol concentration (BAC) defining driving while intoxicated	Laws or court cases holding alcoholic bev. servers liable	
				Statute	Court
Alabama	21[1]	90 days	0.10	yes	yes
Alaska	21	90 days	0.10	yes	yes
Arizona	21[1]	90 days	0.10	yes	yes
Arkansas	21	90 days	0.10		
California	21	6 mos.	0.10	yes	
Colorado	21[1]	3 mos.	0.10[4]	yes	yes
Connecticut	21	1 yr.	0.10	yes	
Delaware	21	3 mos.	0.10[4]		
District of Columbia	21[1]	6 mos. (rev.)	0.10[4]		
Florida	21	6 mos.	0.10	yes	yes
Georgia	21[1]	1 yr.	0.10[4]	yes	yes
Hawaii	21	90 days	0.10		yes
Idaho	21[1]	6 mos.	0.10[4]	yes	yes
Illinois	21	1 yr. min.	0.10	yes	
Indiana	21	60 days-1 yr.	0.10		yes
Iowa	21	180 days	0.10	yes	
Kansas	21	Limited use, 90 days	0.10		
Kentucky	21	30 days-6 mos.	0.10		yes
Louisiana	21[1,2]	60 days	0.10		yes
Maine	21	90 days	0.08 (.02 under 21)	yes	
Maryland	21	60 days max.	0.10		
Massachusetts	21	45-90 days	0.10		yes
Michigan	21	6 mos.-2 yrs.	0.10	yes	
Minnesota	21	30 days	0.10	yes	
Mississippi	21	90 days-1 yr.	0.10		yes
Missouri	21	30 days	0.13[4]		yes
Montana	21[1]	6 mos.	0.10	yes	yes
Nebraska	21	6 mos.	0.10		
Nevada	21	90 days	0.10		
New Hampshire	21	90 days-2 yrs.	0.10		
New Jersey	21	6 mos.	0.10		yes
New Mexico	21	90 days	0.10 (.05 under 18)	yes	yes
New York	21	6 mos.	0.10	yes	
North Carolina	21	1 yr.	0.10	yes	yes
North Dakota	21	91 days	0.10	yes	
Ohio	21	60 days	0.10	yes	
Oklahoma	21	2-6 mos.	0.05-0.10		
Oregon	21	1 yr.	0.08	yes	yes
Pennsylvania	21	1 yr.	0.10	yes	yes
Rhode Island	21	3-6 mos.	0.10	yes	
South Carolina	21	6 mos.	0.10		
South Dakota	21	30 days	0.10		
Tennessee	21[1]	1 yr.	0.10		
Texas	21	90 days-1 yr.	0.10[4]		yes
Utah	21	90 days	0.08[4]	yes	yes
Vermont	21	3 mos.-1 yr.	0.10	yes	
Virginia	21[1]	6 mos.	0.10		
Washington	21	90 days	0.10		yes
West Virginia	21[1]	6 mos.	0.10		
Wisconsin	21	6 mos.	0.10		yes
Wyoming	21	90 days	0.10	yes	yes

*All data are as of July 1, 1988.

[1]"Grandfather clause"—Persons under 21 reaching previous legal drinking age before a certain date retain their drinking age status. [2]18-20 year-olds permitted to drink in private homes or clubs when accompanied by a parent, spouse or guardian age 21 or older, or for medical or religious reasons.

Source: Insurance Information Institute.

Special measures	State
Mandatory school for convicted DWIs	Alabama
Ban on "happy hours"; some local REDDI[5] lines	Alaska
	Arizona
Governors' advisory council	Arkansas
Toll-free number to report DWI suspects; open container law	California
Administrative license revocation; REDDI[5] line; first offense 48 hrs. jail or public service	Colorado
48 hours in jail or public service for first offense	Connecticut
	Delaware
Alcohol awareness rehabilitation courses for first offenders	District of Columbia
Statewide rehabilitation program	Florida
Required high school courses on drinking and driving; DWI grand jury	Georgia
Mandatory education; roadblocks; alcohol to minors by parents only	Hawaii
Mandatory treatment for DWIs; REDDI[5] hot line	Idaho
Second and subsequent offenses classified as felonies	Illinois
	Indiana
Toll-free hot line; CB radio watch	Iowa
REDDI[5] hot line	Kansas
30-day suspension with education program, six months without; under 18 lose license 6 months or until 18	Kentucky
Mandatory education and community service; "hardship" law	Louisiana
First offenders face $300 fine, 48 hrs. jail if BAC over .15; drivers under 21 lose licenses if BAC over .02	Maine
Court may order ignition lock device for drivers on probation	Maryland
Ban on "happy hours"; 14 days jail for 2d offense; 1-15 yrs. for vehic. homicide; roadblocks	Massachusetts
	Michigan
Administrative suspension at BAC .10	Minnesota
Rehabilitation program with incentives (reduced suspension)	Mississippi
Administrative revocation at .13, plus 60-day restricted use; REDDI[5] line	Missouri
Fine, jail for first offender DWIs; increased penalties for subsequent offenses	Montana
Trooper incentive program; REDDI[5] line	Nebraska
2 days jail or public service; 3d DWI in 7 years a felony; no DWI plea bargaining; REDDI[5] line	Nevada
	New Hampshire
$1,000 surcharge for convicted DWIs	New Jersey
Administrative license suspension pending hearing; vehicles of repeat offenders impounded 90 days	New Mexico
"Stop DWI" education program; aggravated unlicensed operation an offense; 1 year rev. under 21	New York
Color coding on driver licenses to better enforce drinking age	North Carolina
Mandatory substance addiction evaluation for first offenders	North Dakota
Educational program for first offenders; REDDI[5] program	Ohio
Governor's task force	Oklahoma
CB reporting system; REDDI[5] program	Oregon
Under age purchase or consumption of alcohol may result in loss of license	Pennsylvania
Toll-free hot line; community service; 6-month suspension for teen-agers with BAC of .04 or more	Rhode Island
Open container law; drunk drivers subject to insurance premium surcharges	South Carolina
	South Dakota
Mandatory education requirement	Tennessee
Mandatory education program for the first offense; hot line; open container law	Texas
Jail or community service for first offense	Utah
BAC reading on breathalizer test given 2 hrs. after arrest is presumed to be same as at time of arrest	Vermont
Jail term up to 1 year; alcohol safety action program; court ordered DWI program	Virginia
Sophisticated testing procedures; toll-free hot line; CB reporting system; task force	Washington
Administrative license suspension	West Virginia
	Wisconsin
REDDI[5] hot line	Wyoming

[4]Except for "non-intoxicating" beer. [5]per se definition (state has law re: "presumed intoxicated" BAC number). [5]REDDI is an acronym for Report Every Drunk Driver Immediately.

Accidental Deaths

Accidents in the United States in 1987 took approximately 94,000 lives. The toll was one percent lower than the revised 1986 total of 94,500.

National Safety Council data showed reductions in deaths in public (non-motor vehicle) accidents and in accidents in the workplace.

Accidental Deaths, 1986–1987

	1987	1986	% Change
All Accidents	94,000	94,500	−1%
Motor Vehicles	48,700	48,300	+1
Home	20,500	20,500	N.C.
Work	11,100	11,200	−1
Public (non-motor vehicle)	18,000	19,000	−5

NOTE: Death figures shown for the four separate classifications total more than the "All Accidents" figure due to rounding and because some deaths are included in more than one classification.

Source: National Safety Council

Deaths in Home Accidents

Falls and fires, the first and second leading causes of accidental deaths in the home, accounted for approximately half of such fatalities in 1987, according to National Safety Council estimates. The number of deaths attributed to home accidents has been declining for many years, and the 1987 total of 20,500 was nearly 30 percent lower than the toll of 29,000 recorded in 1950.

Numbers and Types of Home Accident Deaths, 1978–1987

			Suffocation		Poisoning by				
Year	Falls	Fires, burns*	Ingested object	Other	Solids, liquids	Gases, vapors	Firearms	Other	Total
1978	7,400	5,100	1,800	800	2,400	1,100	1,000	3,200	22,800
1979	7,100	4,900	2,000	500	2,500	900	1,100	3,500	22,500
1980	7,100	4,800	2,000	500	2,500	700	1,100	4,100**	22,800
1981	6,800	4,700	2,000	500	2,600	800	1,000	3,300	21,700
1982	6,500	4,300	2,100	600	2,700	800	1,000	3,200	21,200
1983	6,500	4,100	2,200	600	2,700	800	900	3,400	21,200
1984	6,400	4,100	2,300	600	3,000	700	900	3,200	21,200
1985	6,500	4,000	2,400	600	3,200	700	900	3,300	21,600
1986	5,900	3,700	2,300	600	3,500	600	800	3,100	20,500
1987	6,200	3,900	2,000	600	3,500	600	700	3,000	20,500

*Includes deaths resulting from conflagrations, regardless of nature of injury.
**Includes about 1,000 excessive heat deaths due to summer heat wave.

Source: National Safety Council estimates

Accidents by Age of Drivers

Compilations based on reports from state traffic authorities show that drivers under age 25 are involved in a disproportionately high number of traffic accidents. According to the National Safety Council, drivers in that age group made up 19.1 percent of the motoring population of the United States in 1987, but comprised 33.4 percent of the drivers involved in all accidents and 31.4 percent of drivers in fatal accidents. Drivers in the 20–24 and the 75 and over age brackets shared the worst fatal accident rate in 1987—61 per 100,000 drivers. Drivers under age 20 had the highest overall accident rate—37 per 100 drivers.

Accidents by Age of Drivers, 1987

Age group	Number of drivers	% of total	Drivers in all accidents	% total	Drivers in fatal accidents	% of total	Driver involvement rate	
							All*	Fatal**
Under 20	14,100,000	8.7%	5,200,000	15.8%	8,200	13.9%	37	58
20–24	16,900,000	10.4	5,800,000	17.6	10,300	17.5	34	61
25–34	39,800,000	24.6	9,100,000	27.6	16,300	27.6	23	41
35–44	33,200,000	20.5	5,400,000	16.4	9,500	16.1	16	29
45–54	23,400,000	14.5	2,900,000	8.8	5,600	9.5	12	24
55–64	18,500,000	11.4	2,200,000	6.6	4,000	6.8	12	22
65–74	12,500,000	7.7	1,500,000	4.5	2,900	4.9	12	23
75 and over	3,600,000	2.2	900,000	2.7	2,200	3.7	25	61
Totals	162,000,000	100.0	33,000,000	100.0	59,000	100.0	20	36

*Drivers in all accidents per 100 drivers in each age group.
**Drivers in fatal accidents per 100,000 drivers in each age group.
Source: National Safety Council

Automobile Repair Costs

While the cost of the labor involved in repairing damaged automobiles continues to rise, the average cost of some replacement parts is on the decline, due in part to competition from independent parts manufacturers whose products often are less expensive than those made by manufacturers of the original equipment. Nevertheless, a study by the Alliance of American Insurers showed that the money it could cost to rebuild completely a demolished 1988 Buick Skylark Custom Coupe would be more than enough to buy three new ones.

The Alliance said that while the car was valued at about $12,500, the cost to rebuild the vehicle using parts made by the original equipment manufacturer would be more than $40,300, or 3.2 times the original cost. The study included parts and paint, but not the cost of labor. The car selected for the study was equipped with various popular options.

Rising insurance costs reflect the fact that coverages which pay for vehicular damage typically account for about two-thirds of the total cost of an insurance policy on a late-model car.

The table below reflects only a small change over a six-year period in the cost of replacing frequently damaged parts of the same model 1982 car.

Cost of Replacing Selected Parts, 1982 and 1988*

1982 Oldsmobile Cutlass Supreme 2-door sedan damaged in:

	April 1982		April 1988	
	Parts	Labor**	Parts	Labor***
Front bumper assembly	$ 936.91	$ 49.62	$ 853.79	$ 79.94
Grille and headlight assemblies	449.81	54.93	523.97	98.21
Hood assembly	399.04	44.30	450.94	59.38
Front fender assembly (one side)	347.10	65.56	322.90	93.64
	$2,132.86	$214.41	$2,151.60	$331.17
Total, parts and labor		$2,347.27		$2,482.77

*Data do not include costs of materials and labor for painting exterior body panels.
**At $17.72 an hour.
***At $22.84 an hour.
Sources: Parts costs: Insurance Institute for Highway Safety, Motor Crash Estimating Guides, April 1982 and April 1988; labor costs: Allstate Insurance Company.

Low-Speed Crash Tests

Five-mile-an-hour crash tests of small 1988 model cars resulted in damages ranging from $382 to $3,140, prompting renewed criticism of a federal traffic safety agency for the weakness of current automobile bumper standards.

"Damage like this is unnecessary," said Brian O'Neill, president of the Insurance Institute for Highway Safety (IIHS), which conducted the tests of 27 two-door models. "The bumpers on any car ought to prevent all damage in impacts as low as 5 miles per hour."

During the early 1980s, a federal regulation required cars to pass 5 mph front and rear barrier tests without damage, but that rule was rolled back to a 2.5 mph standard by the National Highway Traffic Safety Administration (NHTSA) in 1982. IIHS noted that some cars are still built with bumpers capable of withstanding the 5 mph impacts.

"NHTSA continues to refuse to acknowledge the compelling evidence that substantially weakened bumpers result in a much greater frequency of low speed crash damage with no substantial compensating benefits," IIHS said. "Consumers who have purchased cars with weak bumpers have been poorly served by their government."

Four tests of the 1988 models, all conducted at 5 mph, involved crashing the cars' front and rear ends into a flat barrier, front ends into an angle barrier, and rear ends into a steel pole similar to those found in parking lots.

Ten of the cars experienced no damage in the front and rear barrier tests, but all the cars were damaged in the angle barrier test and all but one in the pole impact.

Ford's Escort EXP had the best performance of the 1988 models tested, with the majority of its damage occurring in the rear pole test. The Honda

Civic CRX sustained $3,140 in damage—an amount which IIHS said was equivalent to more than one-third of the car's base price.

The Institute commented that the tests showed widely varying results, even among models from the same manufacturer.

Ford's Escort Pony still has the bumper system designed into it in 1986, when tests showed it performed well. In contrast, two Ford imports, the Festiva L Plus, a Japanese import, and the Mexican-built Mercury Tracer, experienced significant damage.

General Motors' Japanese-made Chevrolet Spectrum was the only car that withstood the real pole test without damage, although it sustained $100 in damage in the rear barrier impact. In contrast, the American-made Pontiac Fiero and Korean-built Pontiac LeMans were among those with the worst damage.

All four Toyotas tested were among the best performers, with the flat barrier tests producing no damage at all.

Repair Cost‡ from Low-Speed Crash Tests of 1988 Model Small 2-Door Cars

Make and Model	Front into barrier	Rear into barrier	Front into angle barrier	Rear into pole	Total damage
Ford Escort EXP	$ 0	$ 10	$ 53	$ 319	$ 382
Ford Escort Pony*	0	0	216	191	407
Chevrolet Spectrum	0	100	312	0	412
Toyota Corolla	0	0	227	214	441
Toyota Celica ST*	0	0	213	357	570
Toyota Corolla FX	0	0	234	479	713
Hyundai Excel GL	0	36	372	359	767
Toyota Tercel EZ	0	0	493	384	877
Mazda 323	0	0	504	374	878
Subaru DL 3-Door	0	0	411	518	929
Chevrolet Sprint	0	147	465	415	1,027
Subaru XT GL 2wd	0	39	605	466	1,110
Nissan Pulsar NX XE	44	167	558	421	1,190
Mitsubishi Cordia*	155	0	654	384	1,193
Dodge Daytona	327	524	246	192	1,289
Nissan Sentra E	0	0	447	871	1,318
Mazda MX-6 DX	0	29	205	1,168	1,402
Subaru Justy DL	154	113	579	589	1,435
Plymouth Sundance	86	131	614	622	1,453
Mercury Tracer	0	0	685	829	1,514
Volkswagen Golf	160	283	308	846	1,597
Acura Integra LS	83	0	766	808	1,657
Volkswagen Fox	118	548	315	724	1,705
Ford Festiva L Plus	328	132	557	635	1,752
Subaru GL Hatchback 2wd	0	0	646	1,154	1,800
Pontiac Fiero	0	138	659	1,138	1,935
Honda Civic	0	591	547	822	1,960
Volkswagen Jetta	220	395	571	780	1,966
Pontiac LeMans	277	45	777	1,022	2,121
Yugo GV*	312	537	863	1,044	2,756
Honda Civic CRX HF	176	922	676	1,366	3,140

*These four cars were tested in 1986. The designs of the corresponding 1988 models are virtually identical, so the 1986 results are relevant to new cars. Repair costs have been adjusted to reflect 1988 parts and labor prices.

‡All repair costs listed are rounded to the nearest dollar. Estimates were completed in January 1988 by two independent damage appraisers, using a labor rate of $26 per hour.

Source: Insurance Institute for Highway Safety

Auto Collision Insurance Claims

Sports and specialty cars continue to dominate the list of passenger vehicles with the most frequent and most costly collision insurance claims. The Highway Loss Data Institute (HLDI) said a study of the collision coverage loss experience of 1987 model passenger cars showed that of the 15 models with the poorest records, 10 were sports or specialty cars and the others were small two-door models. Most are imported models.

A list of 14 cars with the best overall results included only one specialty model, the Cadillac Fleetwood d'Elegance. The Honda Civic station wagon was the only import, as well as the only small vehicle, on that list, which was dominated by large domestic models.

The findings paralleled those of similar studies in previous years.

The study also included an analysis of the frequencies and sizes of collision coverage claims for damage to 1986 and 1987 model cars. The supporting data were provided by 13 insurance companies.

HLDI said the study showed, as in past years, that claim frequencies, average loss payments per claim and average loss payments per insured vehicle year generally decreased with increasing vehicle size in all body style groups.

Of the 1987 models, the GMC Safari Van was shown to have the best overall record with a result 65 percent better than the average for all cars. The Chevrolet Astro Van was the only other model with a result less than half the all-car result.

The Chevrolet Corvette Convertible and the two-door Chrysler Conquest headed the list of vehicles with the worst overall collision coverage experience, with results more than triple the all-passenger-car average. Three other vehicles had results more than twice the average.

The table on the next page lists the 1987 models with the best and the worst collision coverage loss experience based on average loss payments per insured vehicle year, which combines claim frequency and average loss payment per claim. The accompanying chart compares the collision loss experience of the 1987 models by car size and body style group.

The table below compares the collision loss experience of 1987 model cars during their first year of availability, 1986 models during their first two years and 1985 models during their first three years.

Insurance Losses, Collision Coverages, by Years since Introduction, 1985, 1986 and 1987 Models, Passenger Cars

Model year	Years since introduction	Claim frequency per 100 insured vehicle years	Average loss payment per claim	Average loss payment per insured vehicle year
1987	1st	10.3	$1,881	$194
1986	2nd	10.4	1,788	185
1985	3rd	10.1	1,687	170

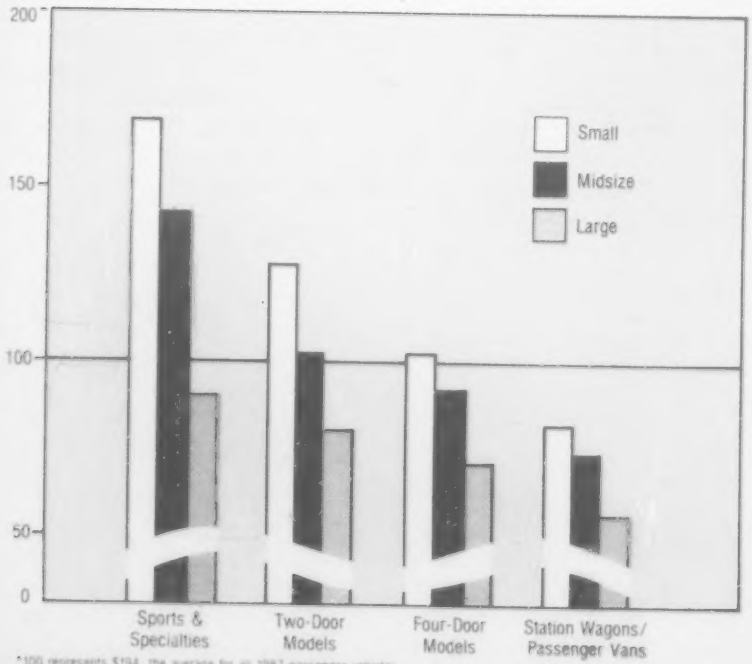
Source: Highway Loss Data Institute

Relative Average Loss Payments per Insured Vehicle Year for 1987 Model Year Passenger Cars with the Best and the Worst Collision Coverage Results

Best results				Worst results			
Make & series	Body style*		RALP**	Make & series	Body style*	Car size	RALP**
GMC Safari Van	P.V.	L	35	Chevrolet Corvette Convertible	Sp.	S	329
Chevrolet Astro Van	P.V.	L	45	Chrysler Conquest	2-Dr.	S	329
Dodge Caravan	P.V.	L	53	Porsche 924 Coupe	Sp.	S	235
Ford Crown Victoria	4-Dr.	L	54	Chevrolet Corvette	Sp.	S	224
Cadillac Fleetwood d'Elegance	Sp.	L	54	Porsche 944 Coupe	Sp.	S	205
Plymouth Voyager	P.V.	L	54	Mazda RX-7	Sp.	S	187
Dodge Diplomat	4-Dr.	L	57	Audi 5000	Sp.	M	186
Chevrolet Celebrity	S.W.	M	57	Mitsubishi Mirage	2-Dr.	S	183
Honda Civic	S.W.	S	58	Pontiac Fiero	Sp.	S	166
Ford Aerostar	P.V.	L	59	Volkswagen GTI	2-Dr.	S	165
Chevrolet Caprice	4-Dr.	L	60	Nissan 300 ZX	Sp.	S	163
Mercury Grand Marquis	4-Dr.	L	60	Toyota Supra	Sp.	M	163
Ford Crown Victoria	S.W.	L	62	Ford EXP	Sp.	S	163
Buick Century	S.W.	M	65	Toyota Corolla	2-Dr.	S	163
				Nissan 200 SX	2-Dr.	S	163

*P.V.=passenger van; S.W.=station wagon; Sp.=sports or specialty.
**Relative average loss payment. 100 represents $194, the average for all 1987 passenger vehicles.
Source: Highway Loss Data Institute.

Collision Coverages
Relative Average Loss Payments per Insured Vehicle Year by Car Size and Body Style Group, 1987 Models*



*100 represents $194, the average for all 1987 passenger vehicles.
Source: Prissared by Insurance Information Institute based on data developed by the Highway Loss Data Institute.

Automobile Personal Injury Insurance Claims, Passenger Cars

The relative safety of large model cars again was underscored by the results of a 1987 study of personal injury insurance claims growing out of accidents involving 1984-1986 model passenger vehicles. The study by the Highway Loss Data Institute (HLDI) showed that, as in past years, large models dominate the list of cars with the best overall personal injury insurance claim records.

The survey of medical claim frequencies for injuries to occupants of the late-model cars was based on "no-fault" personal injury protection experience in 19 states and the District of Columbia. Claim frequencies were calculated for all medical claims, with breakdowns of claims with medical payments exceeding $250, $500, and $1,000. Underlying data were provided by 13 automobile insurers.

For the second straight year, the car with the best experience was the Pontiac Parisienne station wagon, whose overall claim frequency rate was 48 percent below the average for all cars. The Parisienne also had the lowest frequency of claims exceeding $250. The Plymouth Voyager had the lowest frequency of claims exceeding $500, and the midsize Volvo 240 station wagon had the lowest frequency of claims exceeding $1,000.

HLDI said 13 cars had at least one claim frequency result that was more than 40 percent lower than the result for all cars combined, as shown in the table at the top of the next page. The list included 11 large models and only one small model, the four-door Saab 900. Ten of the 13 cars were manufactured in the United States.

As shown in the second table on the next page, 17 models had at least one claim frequency more than 40 percent worse than the all-car result for any of the claim size categories. All 17 were small models, and 12 were imported models, 11 from Japan and one from Korea.

Among the cars with the worst injury loss experience, the four-door Chevrolet Spectrum had the highest overall injury claim frequency, 77 percent above average. The Spectrum also had the highest frequency of claims exceeding both $250 and $500. The two-door Chevrolet Chevette had the highest frequency of claims exceeding $1,000.

HLDI noted that claims exceeding $250 represented about half of all claims, but accounted for nearly 97 percent of the total dollars in medical payments. Claims in excess of $1,000 accounted for nearly 85 percent of the total dollars.

A review of injury claim frequencies involving vans, pickups and utility vehicles showed that large utility vehicles had the best injury experience and small utility vehicles and small pickups had the worst.

In the exhibits on the next page, tabulations of passenger car models with the best and the worst injury loss experience are expressed in relative terms, with 100 representing the average claim frequency for all models.

Make & series	Body style	Car size**	All	Relative claim frequencies by size of claim* Over $250	Over $500	Over $1,000
Pontiac Parisienne	S.W.	L	52	47		
Mercury Grand Marquis	S.W.	L	53	52		
Oldsmobile Custom Cruiser	S.W./PV	L	54	51	56	
Buick Electra	S.W.	L	54			
Mercury Grand Marquis	2-Dr.	L	55	60		
Jaguar XJ6	Sp.	L	57	61		
Volvo 240	S.W.	M	58	57	55	56
Chevrolet Caprice	S.W.	L	60	55	55	57
Dodge Diplomat	4-Dr.	L	61	59		
Plymouth Voyager	S.W./PV	L	63	59	53	51
Ford Crown Victoria	S.W.	L	64	60	58	
Dodge Caravan	S.W./PV	L	65	63	60	56
Saab 900	4-Dr.	S	66	57	59	

*Numbers reflect the frequency of claims relative to the value 100 which represents the average for all vehicles.
**S (Small): Wheelbase up to 99 inches; M (Medium): Wheelbase greater than 99 inches to 109 inches; L (Large): Wheelbase greater than 109 inches.
Source: Highway Loss Data Institute

Make & series	Body style	Car size**	All	Relative claim frequencies by size of claim* Over $250	Over $500	Over $1,000
Chevrolet Spectrum##	4-Dr.	S	177	192	190	
Hyundai Excel#	4-Dr.	S	161			
Mitsubishi Mirage##	2-Dr.	S	158			
Chevrolet Spectrum##	2-Dr.	S	153	156		
Chevrolet Sprint##	2-Dr.	S	152			
Nissan Pulsar	2-Dr.	S	151	149	149	139
Mitsubishi Tredia	4-Dr.	S	149	167		
Chevrolet Cnevette	2-Dr.	S	149	155	153	155
Plymouth Colt##	4-Dr.	S	145			
Chevrolet Chevette	4-Dr.	S	143	145	144	142
Pontiac 1000	2-Dr.	S	142	159		
Nissan Sentra	4-Dr.	S	142	143	146	148
Dodge Charger	2-Dr.	S	141	135	136	130
Plymouth Turismo	2-Dr.	S	140	142	138	134
Nissan Sentra	2-Dr.	S	139	140	144	144
Mitsubishi Cordia	2-Dr.	S	137	143		
Nissan 200SX	2-Dr.	S	127	134	138	143

*Numbers reflect the frequency of claims relative to the value 100 which represents the average for all vehicles.
**S (Small): Wheelbase up to 99 inches.
1986 models only.
1985 and 1986 models only.
Source: Highway Loss Data Institute

Insured Automobile Theft Losses

Activities of thieves who specialize in automobiles and their component parts continue to follow familiar patterns, according to a 1988 study by the Highway Loss Data Institute (HLDI) of the frequency and size of insured theft losses involving 1985, 1986 and 1987 model passenger vehicles.

The study showed, as has been the case for several years, that while the most frequently victimized individual models are European-manufactured cars, the thieves often are more interested in the cars' radios and other parts than in the vehicles themselves.

But the biggest dollar losses, by far, result from thefts of sports and specialty models. HLDI said that while those cars account for only about 15 percent of the total insurance exposure, they account for more than 25 percent of all the theft claims and for about 40 percent of the total dollars paid for those claims.

The study summarized findings involving theft claims for 1987 model passenger cars during their first year of availability, 1986 models during their first two years, and 1985 models during their first three years. It took into account any theft losses paid under the comprehensive portion of automobile insurance policies, including those involving thefts of items from cars as well as thefts of the cars. The study was based on data provided by 13 insurance companies.

HLDI identified 11 car models with relative claim frequencies more than five times the average for all cars in at least one of the three years or more than four times the average in any two of the three model years. Seven of the 11 are Volkswagen models, and HLDI said that except for the U.S.-made VW GTI and VW Golf, all are European imports. However, all 11 cars on the high theft frequency list had lower-than-average loss payments per theft claim, which suggests that many of the claims are for stolen components (radios are frequently stolen from these models) rather than for the vehicles themselves. HLDI said the year-to-year consistency in the results suggests that newer models of the same cars are also likely to have worse than average theft claim frequencies.

The VW GTI had the highest reported theft claim frequency in each of the three model years, as much as 11 times the result for all cars combined in 1986 and nearly 11 times the average in 1987.

Among nine listed cars with the highest relative average loss payments per insured vehicle year, seven are sports or specialty models. All but one had above average results for both claim frequency and average loss payment per claim. Six of the nine cars are domestic models, all manufactured by General Motors. HLDI noted significant improvement in the theft results for the 1986 model of the Chevrolet Corvette, which General Motors equipped with a newly designed theft deterrent system beginning in the 1986 model year. The 1986 Porsche 911 Coupe had the highest loss payment per insured vehicle year, with a result more than 16 times the all-car average. The Porsche also had the highest average loss payment per claim,

with a relative index of 525 translating to an average claim payment of $10,620.

Of 11 listed cars with the least frequent claims, nine are domestic models and all are either four-door models or station wagons. Ford and Mercury each had three models among the cars with the lowest theft claim frequencies.

Thirteen cars with the lowest average loss payments per insured vehicle year also are predominantly domestic models, most of them station wagons. HLDI said that, as a group, station wagons and passenger vans represent more than 10 percent of the exposure in each model year, but account for only 5 percent of the claims and 3 percent of paid theft losses.

The table below reflects, for 1987, 1986 and 1985 passenger cars, the findings by car size relative to the results for all vehicles combined, with 100 representing the average of all cars for each model year. Thus, a designation of 52 for 1987 large station wagons and passenger vans means a result which is 48 percent lower than the all-car average for 1987; a designation of 192 for 1987 small sports and specialty cars-translates into a result 92 percent higher than the average.

Loss Experience Summary by Vehicle Size and Model Year, Theft Losses, 1985-87 Passenger Cars

Car size group	Relative claim frequency			Relative average loss payment per claim			Relative average loss payment per insured vehicle year		
	1987 Models	1986 Models	1985 Models	1987 Models	1986 Models	1985 Models	1987 Models	1986 Models	1985 Models
Two-door models									
Small	113	118	117	64	61	67	72	72	79
Midsize	87	86	84	167	153	128	145	131	107
Large	65	78	97	126	111	118	82	87	115
Four-door models									
Small	131	124	98	51	54	59	67	66	58
Midsize	61	67	63	92	77	70	56	52	44
Large	80	90	81	138	108	101	111	97	82
Station wagons/ passenger vans									
Small	64	48	52	66	64	63	42	31	33
Midsize	43	39	38	49	46	47	21	18	18
Large	52	49	47	55	62	66	29	31	31
Sports & specialty									
Small	192	186	188	136	123	156	262	229	292
Midsize	172	186	211	183	165	128	315	307	269
Large	207	175	195	111	122	143	230	214	279
Actual value of 100 base	9.3*	10.3*	10.7*	$2,062	$1,985	$1,943	$19.1	$20.4	$20.7

* Frequencies of claims per 1,000 insured vehicles

NOTE: Small cars are defined as vehicles with wheelbases less than 100 inches; midsize cars as vehicles with wheelbases of 100 to 109 inches; large cars as vehicles with wheelbases greater than 109 inches.

Source: Highway Loss Data Institute

Accidents at Work

Accidental deaths in the nation's workplaces continued their gradual annual decline with a drop of 100 on-the-job fatalities, to 11,100, in 1987. The modest improvement was achieved despite a rise of about 2 percent in the size of the employed labor force. The estimated number of workplace injuries was the same, 1,800,000, as in 1986.

Fatality and injury rates (incidents per 100,000 workers) both hit new low marks in 1987.

The National Safety Council estimated the dollar cost of work accidents in 1987 at a record $39.8 billion, 21 percent higher than the 1986 total and almost 14 percent greater than the previous high mark of $35 billion recorded in 1985. While the cost of work accidents generally has been rising over the years, the upward trend should be interpreted in terms of a growing work force and a steady diminution in the value of the dollar. Applying these factors in terms of a constant 1967 dollar, the cost of occupational accidents averaged $103.33 per worker in 1987 as compared to $75.36 in 1960, $87.42 in 1970 and $114.48 in 1980.

The cost of work accidents includes wages lost and medical expenses, as well as indirect losses resulting from damage to equipment and materials, production delays, time lost by workers not involved in the accident, and the administrative costs of insurance.

Work Fatalities and Injuries, 1960–1987

Year	Employed labor force (millions)	Fatalities	Fatalities per 100,000 workers	Injuries	Injuries per 100,000 workers
1960	65.8	13,800	21.0	1,950,000	2,964
1970	78.7	13,800	17.5	2,200,000	2,795
1980	99.3	13,200	13.3	2,200,000	2,216
1981	100.4	12,500	12.5	2,100,000	2,092
1982	99.5	11,900	12.0	1,900,000	1,910
1983	100.8	11,700	11.6	1,900,000	1,885
1984	105.0	11,500	11.1	1,900,000	1,810
1985	107.2	11,400	10.8	2,000,000	1,866
1986	109.6	11,200	10.2	1,800,000	1,642
1987	111.7	11,100	9.9	1,800,000	1,611

Source: Bureau of Labor Statistics, National Safety Council

Economic Losses* from Work Accidents, 1960–1987

Year	Economic loss	Cost per worker (1967 dollars)	Year	Economic loss	Cost per worker (1967 dollars)
1960	$ 4,400,000,000	$ 75.36	1983	$31,200,000,000	$103.66
1970	8,000,000,000	87.42	1984	30,800,000,000	94.16
1980	28,000,000,000	114.48	1985	35,000,000,000	101.26
1981	30,200,000,000	110.40	1986	32,800,000,000	92.77
1982	29,400,000,000	102.21	1987	39,800,000,000	103.33

*Figures do not include direct losses in business fires.

Sources: National Safety Council; Bureau of Labor Statistics Consumer Prices

Occupational Disease

An increasing awareness of potential disease-causing agents, especially those associated with the workplace, has helped to focus attention in recent years on occupational diseases and ways to compensate their victims.

The insurance system which provides compensation for workplace injuries and diseases—workers' compensation—was developed early in the twentieth century when the greatest concern was the need to compensate for traumatic injuries, such as fractures, lacerations and amputations resulting from accidents with machines. Occupational risks which have emerged in the latter part of the century have posed new challenges to those responsible for providing that compensation.

The 1980s have been marked by a sharp increase in insurance claims and lawsuits stemming from exposure to asbestos, a construction material widely used to insulate, soundproof and fireproof buildings until it was found to be cancer-causing, and by mounting concern over the possible effects of exposure to toxic materials in general.

Long Latency and Causality

The fundamental problem posed by occupational disease stems from the often long latency period between exposure to a particular substance (such as asbestos) and the onset of the disease. With the typical on-the-job injury caused by a sudden identifiable incident such as a hand being caught in a machine, it is readily apparent that the injury occurred at the time and as a result of the accident.

But with workers who contract debilitating diseases as a result of exposure to hazardous substances, there often is a time lag between the first exposure to a substance and the point at which a person becomes ill. While some diseases such as skin rashes caused by exposure to caustic materials show up in less than a year, the latency period for illnesses resulting from exposure to carcinogenic substances can be a decade or more—as long as 50 years for some asbestos-related diseases.

As a result of the often long time lag between the exposure and the manifestation of illness, workers' compensation claims sometimes have been barred by statutes of limitation which begin to run at the time of exposure. Moreover, there often has been controversy as to whether benefits should be paid at levels in effect at the time of exposure or at the generally higher levels in effect when the disease becomes manifest. Also, there have been problems in determining at what point in an employee's work history the illness was contracted and who was responsible for the payment of benefits.

The problem is further compounded when a worker has been exposed to a substance made by more than one manufacturer, when a company has been insured by more than one insurer during the period from the worker's initial exposure to the point at which the disease was discovered, and when previous employers or their insurers are no longer in business. This last point is a principal area that recent litigation and legislation have addressed.

A further problem is that of causality. Even when a statistically significant number of cases of cancer or other serious illnesses are reported in conjunction with evidence of possible exposure to harmful substances, scientific cause-and-effect relationships generally are hard to prove and a precise diagnosis of certain diseases often is possible only with an autopsy.

Moreover, diseases associated with hazardous substances usually are not uniquely attributable to a single work-related cause. Cancer, for example, may be caused by one or more of many factors, not just by substances found in the workplace.

Steps, Studies to Deal with the Problem

Two examples of attempts to deal with what amounts to timing concerns are legislation passed in 1986 in New York and a May 1987 court case in California.

The New York law addressed tort and insurance reform, including a provision amending the statute of limitations for toxic substance cases. People exposed to asbestos, chlordane, polyvinyl chloride, tungsten carbide and DES who have already suffered adverse health effects from the exposure have one year to bring suit. The law deals with long-latent illnesses which would not be discovered or diagnosed within three years of exposure by changing the trigger (the time the compensability "clock" begins) from exposure to discovery.

The California decision validated the "triple trigger" theory regarding which insurers should pay the claims of thousands of asbestos victims. All policies in effect during the periods of exposure to asbestos, the subsequent development of the disease (latency period), and the manifestation of the disease would provide coverage.

At the federal level, Congress and federal agencies are studying means of dealing with other aspects of the problem. Both the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) have taken steps to limit future exposure to asbestos. An OSHA regulation which took effect in July 1986 mandates a 10-fold reduction in the amount to which workers may be exposed—a rule which OSHA predicted will eliminate 90 percent of all deaths caused by asbestos.

Late in 1987, the Labor Department ordered a 90 percent reduction in occupational exposure to benzene, ending a decade-long legal battle over how to reduce leukemia deaths among some 240,000 workers exposed to the substance.

Provisions of new OSHA standards reducing the permissible worker exposure limits for formaldehyde were to be phased in during 1988. Earlier, the EPA had announced that formaldehyde was a probable cause of cancer in humans.

Efforts to resolve the problems involved in compensating for long-term latent occupational diseases have led to a number of proposals, including a recommendation by the National Association of Insurance Commissioners'

Occupational Disease Advisory Committee intended to ensure that an adequate and equitable workers' compensation remedy is available for all worthy occupational disease claims.

Costs—A Look Ahead

According to the National Council on Compensation Insurance (NCCI), the extent of the occupational disease problem appears statistically to be lessening, with O.D. cases in 1984 accounting for less than 1 percent of all workers' compensation claims—down from 2 percent in 1979. NCCI also pointed to two dramatic developments which may have important cost implications for the future.

The first is a precipitous drop in the number of black lung cases from 28.45 percent of workers' compensation occupational disease claims in 1979 to 1.66 percent in 1984. Over the same period, asbestos claims have risen from 1.83 percent of such claims in 1979 to 15.41 percent in 1984. As the table below suggests, the effects on claims costs is clear since average benefits to black lung claimants are far costlier than benefits to asbestos claimants.

However, some insurance industry experts believe the effects of technological developments and advances in disease detection techniques could, in the decades to come, result in a sharp increase in the percentage of workers' compensation cases attributable to occupational disease.

Potential costs are staggering. An official at Lloyd's of London estimated that asbestos claims alone could cost the insurance business as much as $30 billion through the year 2000. Other estimates of ultimate costs to insurers have ranged from $4 billion to more than $170 billion. Four asbestos manufacturers, one of which faces more than 16,000 asbestos liability claims for more than $2 billion, already have filed for bankruptcy.

Occupational Disease Experience

	% of All occupational disease (O.D.) claims		Average indemnity benefits per case	Average medical benefits per case	Average total benefits per case
Disease	1984	1979	1984	1984	1984
Dust disease	6.52%	3.15%	$52,408	$1,545	$53,953
Asbestosis	15.41	1.83	4,731	1,771	6,502
Black lung	1.66	28.45	38,032	3,257	41,289
Byssinosis	0.00	0.04	—	—	—
Silicosis	9.10	2.17	8,378	410	8,788
Respiratory disorder	18.49	18.22	16,671	1,859	18,530
Poisoning, chemical	3.74	3.20	6,236	1,153	7,389
Poisoning, metal	7.44	1.14	1,850	2,865	4,715
Dermatitis	14.29	18.94	3,401	535	3,936
Mental disorders	10.72	5.52	16,720	2,407	19,127
Loss of hearing	1.16	3.31	24,121	1,510	25,631
Contagious diseases	2.37	3.97	1,748	350	2,098
Cancer	0.83	0.78	10,250	2,125	12,375
Other O.D.	8.27	9.28	18,771	3,030	21,801
All O.D. claims	100.00%	100.00%	$13,134	$1,696	$14,830
O.D. Claims excluding black lung			$12,604	$1,662	$14,266

Source: National Council on Compensation Insurance

Crimes against Property

The dollar cost of crime continues to run into the billions, and data of the Federal Bureau of Investigation reflected an increase of 2 percent in the overall crime index in 1987.

The FBI said the number of crimes against property, of which business and industry are major victims, increased about 3 percent in 1987. Dollar losses from the crimes of robbery, burglary, larceny and motor vehicle theft rose by 5 percent to more than $ 2.9 billion.

But the overall cost of crime is much higher when other kinds of offenses, including such costly crimes as embezzlement, arson and vandalism, are taken into account. In 1987, the U.S. Department of Commerce said employee theft alone costs businesses an estimated $40 billion a year.

Major crimes against property countrywide reported by the FBI in 1987:

Robbery: 517,700 offenses; property loss $327 million.

Burglary: 3,236,200 offenses; property loss $3.2 billion.

Larceny-Theft: 7,499,900 offenses; property loss $3.0 billion.

Motor Vehicle Theft: 1,288,700 offenses; property loss $6.4 billion.

The FBI said it also received complete reports on 84,371 arson offenses in 1987. The total was down almost 4 percent from the 1986 figure of 87,585. Estimated dollar losses attributed to arson declined by some 24 percent from $1.2 billion to $907 million, the agency said.

FBI-provided estimates, by state, on the numbers of robberies, burglaries and larceny-thefts and resulting dollar losses in 1987 are shown in the table on page 103. State data on motor vehicle thefts appear on page 104. The average property loss resulting from the crime of robbery was higher in West Virginia ($1,707) than in any other state. The highest average property loss resulting from burglary was $1,405 in New York State; from larceny-theft, $621 in Nevada, and from motor vehicle theft, $8,965 in Louisiana. Total dollar losses resulting from each of the four categories of crime were highest in California.

Crimes against Property in the U.S., 1978–1987*

Year	Robbery	Burglary	Larceny-theft
1978	426,930	3,128,300	5,991,000
1979	480,700	3,327,700	6,601,000
1980	565,840	3,795,200	7,136,900
1981	592,910	3,779,700	7,194,400
1982	553,130	3,447,100	7,142,500
1983	506,570	3,129,900	6,712,800
1984	485,010	2,984,400	6,591,900
1985	497,870	3,073,300	6,926,400
1986	542,780	3,241,400	7,257,200
1987	517,700	3,236,200	7,499,900

*For additional data on automobile thefts, see page 104.

Source: Federal Bureau of Investigation

Estimated Value of Property Stolen in Major Crimes, by State, 1987*

State	Robbery		Burglary		Larceny-theft	
	Offenses	Dollar loss	Offenses	Dollar loss	Offenses	Dollar loss
Ala.	4,581	$ 2,487,483	48,927	$ 40,217,994	99,260	$36,229,900
Alaska	384	230,400	5,093	6,646,365	18,195	8,915,550
Ariz.	4,687	3,538,685	55,059	62,381,847	153,296	49,054,720
Ark.	1,890	1,672,650	25,743	19,384,479	60,862	20,449,632
Calif.	83,341	75,840,310	419,969	508,582,459	896,335	476,850,220
Colo.	3,916	2,392,676	50,580	56,599,020	132,266	44,441,376
Conn.	5,720	3,374,800	39,120	32,078,400	90,852	36,340,800
Del.	789	497,859	6,572	5,809,648	20,453	6,360,883
D. of C.	4,462	1,459,074	11,244	8,331,804	25,012	8,629,140
Fla.	42,869	33,952,248	271,346	265,919,080	546,466	231,155,118
Ga.	13,014	8,407,044	96,572	80,058,188	197,302	79,118,102
Hawaii	1,061	1,355,958	12,515	11,851,705	43,678	19,480,388
Idaho	242	125,598	9,748	6,921,080	27,923	7,232,057
Ill.	36,406	8,773,846	130,147	98,521,279	342,492	109,254,948
Ind.	4,901	1,318,369	52,363	36,130,470	137,722	42,831,542
Iowa	1,025	869,200	26,010	15,579,990	80,489	20,041,761
Kan.	2,032	829,056	28,177	18,963,121	78,043	21,305,739
Ky.	3,361	2,598,053	31,571	24,404,383	70,532	26,449,500
La.	7,987	4,720,317	64,441	64,054,354	148,247	51,293,462
Maine	304	165,376	9,148	6,083,420	28,916	7,922,984
Md.	13,164	8,095,860	52,718	48,342,406	134,485	62,804,495
Mass.	10,379	5,106,468	62,056	48,776,016	127,939	50,407,966
Mich.	25,442	10,660,198	133,602	96,727,848	319,470	105,425,100
Minn.	4,354	1,345,386	45,384	34,083,384	125,686	43,864,414
Miss.	1,496	1,259,632	31,537	21,413,623	47,433	14,941,395
Mo.	8,376	3,936,720	56,711	51,096,611	133,964	40,725,056
Mont.	196	95,844	6,521	7,479,587	27,541	8,014,431
Neb.	751	412,299	13,516	7,149,964	45,692	10,737,620
Nev.	2,744	2,999,192	16,408	20,657,672	35,157	21,832,497
N. H.	280	176,400	7,344	5,596,128	24,426	9,355,158
N. J.	17,862	10,431,408	77,392	69,343,232	219,906	110,612,718
N. M.	1,625	809,250	26,815	24,723,430	56,777	17,260,208
N. Y.	89,721	50,692,365	216,826	304,640,530	539,175	313,260,675
N. Car.	6,023	2,782,626	86,964	63,483,720	165,841	53,069,120
N. Dak.	51	68,187	3,060	1,710,540	14,768	3,943,056
Ohio	16,511	7,495,994	114,580	88,570,340	292,093	89,672,551
Okla.	3,583	3,307,109	58,333	59,849,658	105,369	39,197,268
Ore.	5,338	2,097,834	48,562	50,892,976	113,907	41,803,869
Pa.	17,241	7,689,486	86,177	71,699,264	205,619	75,256,554
R. I.	1,062	369,576	14,208	7,530,240	26,535	8,310,120
S. Car.	3,463	2,219,783	46,511	34,929,761	97,892	32,695,928
S. Dak.	87	18,096	3,787	1,787,464	13,673	3,103,771
Tenn.	9,409	6,614,527	65,632	48,502,048	107,459	41,049,338
Texas	38,053	30,594,612	355,597	401,469,013	711,594	309,543,390
Utah	887	479,867	15,975	12,220,875	71,038	21,311,400
Vt.	92	64,216	6,085	3,036,415	15,485	4,351,285
Va.	6,244	3,434,200	47,642	37,208,402	153,690	48,873,420
Wash.	6,417	3,028,624	86,428	77,785,200	194,131	59,209,955
W. Va.	591	1,008,837	11,450	9,160,000	24,436	8,357,112
Wis.	3,192	1,072,512	40,502	228,675,416	136,058	32,109,688
Wyo.	98	65,366	3,516	2,362,752	14,171	4,109,590

*All figures, including the numbers of offenses, are estimates.

Source: Federal Bureau of Investigation

Motor Vehicle Thefts

Motor vehicle thefts in the United States increased about 5 percent from 1986 to 1987. Decreases were recorded in 20 states, however. Countrywide, the motor vehicle theft rate increased from 673 to 692 per 100,000 registered vehicles.

Motor Vehicle Registrations and Thefts, 1978–1987

Year	Motor vehicle registrations*	Thefts	Ratio of vehicles stolen/regist.	Thefts per 100,000 registrations
1978	153,637,000	1,004,100	1 in 153	654
1979	157,226,178	1,112,800	1 in 141	708
1980	161,614,294	1,131,700	1 in 143	700
1981	164,287,643	1,087,800	1 in 151	662
1982	165,298,024	1,062,400	1 in 156	643
1983	167,718,000	1,007,900	1 in 166	601
1984	169,446,281	1,032,200	1 in 164	609
1985	175,709,000	1,102,900	1 in 159	628
1986	181,890,000	1,224,100	1 in 149	673
1987	186,137,000**	1,288,700	1 in 144	692

*Includes motorcycles.
**Preliminary estimate.
Source: Federal Bureau of Investigation, Federal Highway Administration.

Motor Vehicle Thefts and Estimated Dollar Losses by State, 1987*

State	Thefts	% Change from 1986	Dollar loss	State	Thefts	% Change from 1986	Dollar loss
Alabama	10,731	– 0.8	$ 65,233,749	Missouri	21,755	– 2.1	$102,009,195
Alaska	2,553	–20.8	10,245,189	Montana	1,924	+ 9.3	7,243,860
Arizona	14,308	+ 3.0	65,244,480	Nebraska	2,645	– 1.2	8,255,045
Arkansas	4,932	+ 6.7	24,250,644	Nevada	5,589	+21.5	24,999,597
California	229,624	+11.7	918,266,376	New Hampshire	2,288	– 2.1	11,549,824
Colorado	14,379	– 9.4	61,743,426	New Jersey	64,857	+ 9.7	395,627,700
Connecticut	16,986	+19.1	90,569,352	New Mexico	5,183	+ 2.1	20,944,503
Delaware	2,007	+16.6	11,241,207	New York	125,329	+10.7	648,828,233
Dist. of Col.	6,297	+ 3.1	26,283,678	North Carolina	14,352	+ 8.8	60,795,072
Florida	81,355	+16.5	409,297,005	North Dakota	828	+ 1.7	2,888,064
Georgia	30,637	+16.7	165,164,067	Ohio	41,291	+ 2.2	205,835,635
Hawaii	3,964	+13.7	12,609,484	Oklahoma	19,793	– 7.8	97,064,872
Idaho	1,671	– 8.1	5,536,023	Oregon	12,669	+16.9	44,202,141
Illinois	62,487	–13.9	256,134,213	Pennsylvania	41,680	– 1.1	229,490,080
Indiana	19,610	+ 8.8	89,460,820	Rhode Island	7,725	+12.4	40,139,100
Iowa	4,282	– 5.1	12,182,290	South Carolina	9,618	+ 2.9	48,782,496
Kansas	6,268	– 1.3	26,400,816	South Dakota	678	– 3.0	2,032,644
Kentucky	7,181	– 0.3	34,899,660	Tennessee	27,525	+ 5.4	159,122,025
Louisiana	18,402	– 7.4	164,973,930	Texas	123,367	+ 3.6	726,138,162
Maine	2,058	+ 6.7	8,746,500	Utah	3,519	– 5.3	11,602,143
Maryland	26,386	+ 8.4	144,173,104	Vermont	1,088	+11.0	3,877,632
Massachusetts	54,110	+ 2.4	260,756,090	Virginia	15,022	+18.3	77,783,916
Michigan	69,182	– 5.5	437,922,060	Washington	17,932	+27.7	71,153,940
Minnesota	12,798	+ 5.4	47,749,338	West Virginia	3,067	– 5.5	14,927,089
Mississippi	4,212	+ 6.9	21,308,508	Wisconsin	11,851	– 2.4	36,619,590
				Wyoming	679	–20.6	2,574,089

*Figures are estimates.
Source: Federal Bureau of Investigation.

Arrests by Age Group

Data compiled by the Federal Bureau of Investigation show that persons from 15 through 24 years of age—and, to a lesser extent, persons in the 25–29 age bracket—are involved in a disproportionately high number of arrests for crimes and offenses which often have a direct impact on losses paid by property and casualty insurers.

FBI records show that a majority of all arrests in 1987 for burglary, robbery and motor vehicle theft were of persons in the 15–24 age group, who together comprised only 15.7 percent of the population. Members of that age group also accounted for nearly half of all arrests for larceny and drug abuse.

Persons under age 20 accounted for about 47.8 percent of all arrests for the crime of arson.

Some 44.5 percent of all arrests for driving while under the influence of intoxicants or drugs involved persons 20 through 29 years of age.

Arrests, Distribution by Age, Selected Offenses, 1987

		Burglary		Robbery		Larceny-theft	
Age group	% of population	Arrests	% of total	Arrests	% of total	Arrests	% of total
Under 15	21.5	47,601	12.7	7,188	5.8	162,255	12.9
15–19	7.6	134,431	35.9	35,784	29.0	355,371	28.3
20–24	8.1	78,393	20.9	31,689	25.7	218,150	17.4
25–29	9.0	52,009	13.9	23,224	18.8	171,126	13.6
30–34	8.8	32,602	8.7	13,733	11.1	132,298	10.5
35–39	7.7	16,318	4.4	6,799	5.5	85,619	6.8
40–44	6.4	7,136	1.9	2,705	2.2	46,433	3.7
45–49	5.1	3,265	0.9	1,139	0.9	27,297	2.2
50–54	4.5	1,531	0.4	524	0.4	18,669	1.5
55–59	4.6	807	0.2	289	0.2	14,195	1.1
60–64	4.5	420	0.1	109	0.1	10,357	0.8
65 & Older	12.3	450	0.1	123	0.1	14,772	1.2
All ages	100.0*	374,963	100.0*	123,306	100.0*	1,256,552	100.0

	Motor vehicle theft		Arson		Drunk driving		Drug abuse	
Age group	Arrests	% of total	Arrests	% of total	Arrests	% of total	Arrests	% of total
Under 15	14,056	9.6	3,851	25.4	365	0.0	9,708	1.2
15–19	64,580	44.0	3,393	22.4	89,710	6.4	148,544	18.3
20–24	28,795	19.6	2,272	15.0	312,404	22.2	219,693	27.1
25–29	17,677	12.0	1,766	11.6	314,528	22.3	188,851	23.3
30–34	10,843	7.4	1,418	9.3	234,053	16.6	123,586	15.2
35–39	5,625	3.8	965	6.4	161,444	11.4	66,856	8.2
40–44	2,668	1.8	596	3.9	108,374	7.7	28,996	3.6
45–49	1,249	0.9	352	2.3	70,626	5.0	12,928	1.6
50–54	679	0.5	238	1.6	47,576	3.4	6,080	0.7
55–59	319	0.2	163	1.1	32,847	2.3	3,132	0.4
60–64	117	0.1	92	0.6	20,774	1.5	1,513	0.2
65 & older	145	0.1	63	0.4	17,696	1.3	1,191	0.1
All ages	146,753	100.0	15,169	100.0	1,410,397	100.0*	811,078	100.0*

*Percentage does not add to total because of rounding.

Source: Federal Bureau of Investigation

Aircraft Accidents

Some 1,146 persons died in aircraft accidents in the United States in 1987, 116 more than in the preceding year. The year's most tragic single accident occurred on August 16 when a Northwest Airlines passenger plane crashed onto a freeway at Romulus, Mich., taking 156 lives.

The Michigan crash was one of five fatal accidents involving the nation's major scheduled and non-scheduled airlines, in which a total of 232 persons died. The major airlines flew a record 4.05 billion miles in 1987, according to preliminary data from the National Transportation Safety Board.

Accidents involving scheduled commuter carriers cost 58 persons their lives during 1987, the most in a single year since 1979. The commuter carriers' accident rate per 100,000 aircraft hours rose from 1.06 in 1986 to 2.39 in 1987.

For the ninth consecutive year, accidents in general aviation (aircraft other than large airlines, commuters and air taxis) reached a new low. The number of accidents dropped to 2,420 from 2,581 in 1986, and the number of resulting fatalities declined to 788 from 955.

On-demand air taxis recorded 98 accidents in 1987, down from 117 in 1986. The preliminary death toll was set at 68.

Aircraft Accidents in 1987

	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
U.S. airlines:					
Scheduled	9,711,000	31	4	231	0.309
Non-scheduled	437,000	5	1	1	1.144
Scheduled commuter carriers	1,462,000	35	10	58	2.39
Non-scheduled air taxis	2,900,000	98	31	68	3.38
General aviation	29,320,000	2,420	426	788	8.25

*Preliminary data.
Source: National Transportation Safety Board.

Accidents, Scheduled Airlines, 1983–1987

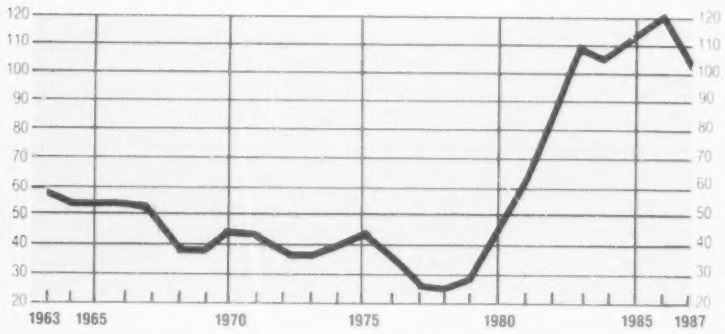
	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
1983	6,649,009	22	4	15	0.331
1984	7,438,497	12	1	4	0.161
1985	7,947,435	17	4	197	0.214
1986	9,356,906	20	1	1	0.214
1987*	9,711,000	31	4	231	0.309

*Preliminary data.
Source: National Transportation Safety Board.

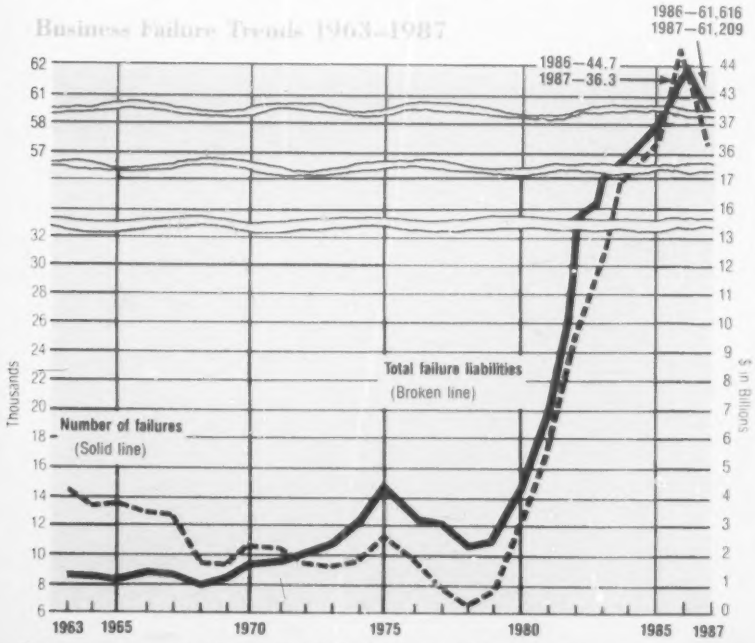
Business Failure Trends

The number of business failures in the United States declined slightly in 1987, from 61,616 in 1986 to an estimated 61,209. Resulting dollar liabilities dropped from $44.7 billion to an estimated $36.3 billion.

Dun & Bradstreet said the failure rate decreased from 120 per 10,000 businesses in 1986 to 102 in 1987. All 1987 data are preliminary.



Source: Insurance Information Institute, based on data provided by the Dun & Bradstreet Corporation.



Source: Insurance Information Institute, based on data provided by the Dun & Bradstreet Corporation.

Health Insurance Benefits

The amount of health insurance benefits paid out annually in the United States totaled more than $248 billion in 1986, with Medicare paying a larger share than any other single category of health care provider. Health insurance benefits paid by Medicare increased by 7.8 percent from $70.5 billion in 1985 to $76 billion in 1986.

Private insurance companies paid some $61.3 billion in health insurance benefits in 1986, up 7.2 percent from about $60 billion in the preceding year.

The following table compares the amounts of health insurance benefits paid in 1985 and 1986 by private insurers and by other guarantors of such benefits, including Medicare and Medicaid in the government sector.

	1986	1985	% Change
Private Insurers	$ 64,303,000,000	$ 59,962,000,000	+ 7.2%
Blue Cross, Blue Shield	40,587,000,000	37,540,000,000	+ 8.1
Other Plans*	36,800,000,000	32,534,000,000	+13.1
Private Sector Total**	$126,502,000,000	$117,609,000,000	+ 9.3
Medicare	76,000,000,000	70,520,000,000	+ 7.8
Medicaid	43,600,000,000	37,509,000,000	+16.2
Totals	$248,102,000,000	$225,637,000,000	+10.0

*Includes Health Maintenance Organizations, employer/employee sponsored plans, etc.

**Private sector total eliminates duplications that result from private insurers and the Health Care Financing Administration ("Other Plans") both reporting Administrative Services Only benefits in their data.

Sources: Health Insurance Association of America; U.S. Health Care Financing Administration

A review by the American Hospital Association disclosed that in 1986 the average cost to hospitals per patient stay ranged from a low of $2,222.87 in Mississippi to highs of $5,267.76 in the District of Columbia and $4,573.28 in Alaska. The range of the average cost to hospitals of a day's stay was from $305.67 in South Dakota to $799.81 in Alaska. Countrywide, the average cost to hospitals per patient day increased 8.8 percent from $460.19 in 1985 to $500.81 in 1986. The average length of a hospital stay was unchanged at 7.1 days.

For state-by-state data, see page 109.

The Cost of Hospitalization and Health Insurance Benefits Paid by Private Insurers

State	Benefits paid by insurance cos. (in thousands) 1984*	Average cost to hospital per patient day 1986	Average length hospital stay in days 1986	Average cost to hospital per patient stay 1986
Alabama	$ 418,000	$417.43	7.0	$2,911.00
Alaska	94,000	799.81	5.8	4,573.28
Arizona	407,000	638.99	6.0	3,810.02
Arkansas	205,000	405.80	6.4	2,572.02
California	3,708,000	705.18	6.3	4,403.97
Colorado	483,000	535.92	6.8	3,622.64
Connecticut	479,000	560.79	7.1	3,932.16
Delaware	79,000	526.27	6.9	3,595.76
District of Columbia	253,000	664.03	7.9	5,267.76
Florida	1,665,000	535.90	7.0	3,715.39
Georgia	847,000	425.77	6.7	2,820.02
Hawaii	64,000	489.93	7.5	3,707.00
Idaho	71,000	402.19	6.5	2,631.11
Illinois	2,129,000	535.03	7.3	3,893.78
Indiana	634,000	491.74	6.6	3,203.69
Iowa	359,000	369.20	8.0	2,940.48
Kansas	278,000	407.00	7.6	3,062.78
Kentucky	285,000	405.60	6.4	2,574.72
Louisiana	677,000	520.06	6.2	3,212.34
Maine	115,000	410.20	7.7	3,120.82
Maryland	480,000	478.15	7.1	3,406.69
Massachusetts	644,000	559.96	7.7	4,259.65
Michigan	792,000	564.42	7.2	4,001.85
Minnesota	476,000	400.29	9.0	3,599.84
Mississippi	297,000	336.07	6.6	2,222.87
Missouri	954,000	504.53	7.4	3,721.81
Montana	79,000	324.35	9.0	2,869.31
Nebraska	240,000	372.45	8.9	3,303.44
Nevada	144,000	765.79	5.7	4,388.89
New Hampshire	99,000	454.38	6.4	2,877.56
New Jersey	912,000	431.32	7.4	3,187.68
New Mexico	175,000	537.43	5.6	2,995.97
New York	2,489,000	463.82	9.1	4,212.70
North Carolina	633,000	408.70	6.9	2,807.27
North Dakota	63,000	344.57	9.8	3,319.66
Ohio	1,238,000	532.69	6.9	3,640.25
Oklahoma	417,000	489.64	6.4	3,116.41
Oregon	266,000	607.49	5.3	3,203.21
Pennsylvania	1,142,000	493.17	7.5	3,662.01
Rhode Island	57,000	485.40	7.6	3,685.93
South Carolina	311,000	397.19	7.0	2,773.97
South Dakota	106,000	305.67	8.9	2,681.63
Tennessee	597,000	425.25	6.9	2,914.89
Texas	2,468,000	517.14	6.1	3,159.53
Utah	144,000	606.10	5.2	3,086.19
Vermont	41,000	353.19	8.5	3,017.43
Virginia	510,000	434.75	7.1	3,057.21
Washington	351,000	614.50	5.5	3,351.95
West Virginia	193,000	427.46	6.6	2,790.35
Wisconsin	639,000	415.29	7.7	3,183.29
Wyoming	68,000	385.62	6.9	2,632.34
Puerto Rico and U.S. Territories	74,000	—	—	—
Countrywide	$57,338,000**	$500.81	7.1	$3,532.51
Previous year totals	$53,581,000**	$460.19	7.1	$3,244.74

*Most recent data available

**Includes $26.982 billion for 1984 and $21.129 billion for 1983 in Administrative Service Agreement benefit payments not allocated by state

Source: Health Insurance Association of America

Automobile Financial Responsibility and Compulsory Laws

Most states have laws, commonly known as financial responsibility laws, under which a person involved in an automobile accident may be required to furnish proof of financial responsibility (usually done in the form of automobile liability insurance) up to certain minimum dollar limits. The provinces of Canada have similar laws. Mexico has no financial responsibility law as such, but requires an auto liability insurance policy written with a Mexican company.

Thirty-nine states and the District of Columbia have laws requiring registered car owners to have liability insurance or, in some cases, some other approved form of security. These "compulsory" auto insurance laws are in effect in Alaska (whose compulsory law has been rescinded effective Jan. 1, 1989), Arizona, Arkansas, California, Colorado, Connecticut, Delaware, the District of Columbia, Georgia, Hawaii, Idaho, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Vermont, West Virginia and Wyoming.

In Illinois, a compulsory auto insurance law enacted in mid-1988 is to become operative on July 1, 1989.

Florida requires its car owners to have first-party "personal injury protection" insurance. Also, a new law scheduled to become effective Oct. 1, 1989, will require Florida motorists to carry a minimum of $10,000 of property damage liability insurance. However, the purchase of bodily injury liability insurance will continue to be optional.

Every state has either a financial responsiblity law or a "compulsory" law. Many have both kinds of statutes. Even where ownership of automobile liability insurance is not compulsory, the existence of the financial responsibility laws, along with the ever-present threat of a financially crippling judgment in the event of an accident, has come to make the possession of automobile liability insurance a virtual necessity for most motorists.

Nevertheless, there are many motorists who are considered doubtful risks or whose poor driving records label them as obviously bad insurance risks. In all states, there are procedures through which such persons are able to obtain coverage. For additional information about these procedures, see "The Automobile Shared Market," page 47.

Automobile Financial Responsibility/Compulsory Limits

State	Liability limits*
Alabama	20/40/10
Alaska	50/100/25
Arizona	15/30/10
Arkansas	25/50/15
California	15/30/5
Colorado	25/50/15
Connecticut	20/40/10
Delaware	15/30/10
District of Columbia	25/50/10
Florida	10/20/5
Georgia	15/30/10
Hawaii	35/unlimited/10
Idaho	25/50/15
Illinois	20/40/15
Indiana	25/50/10
Iowa	20/40/15
Kansas	25/50/10
Kentucky	10/20/5
Louisiana	10/20/10
Maine	20/40/10
Maryland	20/40/10
Massachusetts	10/20/5
Michigan	20/40/10
Minnesota	30/60/10
Mississippi	10/20/5
Missouri	25/50/10
Montana	25/50/5
Nebraska	25/50/25
Nevada	15/30/10
New Hampshire	25/50/25
New Jersey	15/30/5
New Mexico	25/50/10
New York	10/20/5[1]
North Carolina	25/50/10
North Dakota	25/50/25
Ohio	12.5/25/7.5
Oklahoma	10/20/10
Oregon	25/50/10
Pennsylvania	15/30/5
Rhode Island	25/50/10
South Carolina	15/30/5
South Dakota	25/50/25
Tennessee	20/40/10[2]
Texas	20/40/15
Utah	20/40/10
Vermont	20/40/10
Virginia	25/50/10
Washington	25/50/10
West Virginia	20/40/10
Wisconsin	25/50/10
Wyoming	25/50/20
CANADA	
Alberta	$200,000 inclusive**
British Columbia	$200,000 inclusive**
Manitoba	$200,000 inclusive**
New Brunswick	$200,000 inclusive**
Newfoundland	$200,000 inclusive**
Northwest Territories	$200,000 inclusive**
Nova Scotia	$200,000 inclusive**
Ontario	$200,000 inclusive**
Prince Edward Island	$200,000 inclusive**
Quebec	$50,000 property damage[3]
Saskatchewan	$200,000 inclusive**
Yukon	$200,000 inclusive**

*The first two figures refer to bodily injury liability limits and the third figure to property damage liability. For example, 10/20/5 means coverage up to $20,000 for all persons injured in an accident, subject to a limit of $10,000 for one individual, and $5,000 coverage for property damage.

**"Inclusive" means that the amount of liability insurance shown is available to settle either bodily injury or property damage claims—or both. When a claim involving both bodily injury and property damage reaches the "inclusive" limit, payment for property damage is limited to $20,000 in British Columbia, Manitoba, New Brunswick and Newfoundland, and to $10,000 in the other territories having "inclusive" limits.

[1] 50/100 in cases of wrongful death.

[2] 25/50/10 as of Jan. 1, 1990.

[3] Quebec has a complete no-fault system for bodily injury claims, as cited above, for most residents in proportion to their degree of fault. The $50,000 limit relates to liability for damage to property in Quebec and to liability for bodily injury and property damage outside Quebec.

Sources: American Insurance Association; Insurance Bureau of Canada.

Automobile Seat Belt Laws

With the addition of Georgia effective Sept. 1, 1988, 32 states and the District of Columbia have laws requiring motorists to buckle up their seat belts. However, only nine states provide for "primary" enforcement which permits police to stop and ticket unbuckled drivers. In the other ("secondary") states, motorists may be ticketed for not using belts only if they are stopped for another offense.

A 1987 study by the University of North Carolina Highway Safety Research Center shows that only about 48 percent of motorists use their belts in states which have such laws. It also showed wide variations in levels of enforcement by state police, ranging from as few as 10 tickets per 100,000 population in Idaho to as many as 878 in Hawaii. (See also Motor Vehicle Accidents, page 81.)

States with Auto Seat Belt Use Laws*

State	Effective	Penalty	Enforcement
California[1]	1/1/86	Max. fine $20 for 1st offense; $50 for repeaters	Secondary
Colorado	7/1/87	$10 fine	Secondary
Connecticut	1/1/86	$15 fine	Primary
Dist. of Col.	12/12/85	Max. $15 fine	Secondary
Florida	7/1/86	$20 fine	Secondary
Georgia	9/1/88	Max. $15 fine (driver only)	Secondary
Hawaii	12/16/85	$20 fine	Primary
Idaho	7/1/86	$5 fine	Secondary
Illinois	7/1/85	Max. $25 fine	Secondary
Indiana	7/1/87	Max. $25 fine	Secondary
Iowa	7/1/86	$10 fine	Primary
Kansas	7/1/86	Max. $10 fine	Secondary
Louisiana	7/1/86	$25 fine	Secondary
Maryland	7/1/86	Max. $25 fine	Secondary
Michigan	7/1/85	$25 fine	Secondary
Minnesota	10/1/87	None	Secondary
Missouri	9/28/85	Max. $10 fine	Secondary
Montana	10/1/87	$20 fine	Secondary
Nevada	7/1/87	Max. $25 fine or community service	Secondary
New Jersey	3/1/85	$20 fine	Secondary
New Mexico	1/1/86	Min. $25 fine; max. $50 fine	Primary
New York	12/1/84	Max. $50 fine	Primary
North Carolina	10/1/85	$25 fine	Primary
Ohio	5/6/86	$20 fine for drivers; $10 fine for passengers	Secondary
Oklahoma	2/1/87	$10 fine plus $15 administrative costs	Secondary
Oregon[2]	9/27/87	Max. $50 fine	Primary
Pennsylvania	11/23/87	$10 fine	Secondary
Tennessee	4/21/86	Warning for 1st offense; $25 fine for repeaters	Secondary
Texas	9/1/85	Min. $25 fine; max. $50 fine	Primary
Utah	4/28/86	$10 fine	Secondary
Virginia	1/1/88	$25 fine	Secondary
Washington	6/11/86	$20 fine	Secondary
Wisconsin	12/1/87	Possible $10 fine	Secondary

*Laws previously operative in Massachusetts and Nebraska were repealed in November 1986.

[1]Law applies to front and back seat passengers as well as drivers.

[2]Enforcement of Oregon's law suspended pending a November 1988 referendum on whether it should be retained.

Source: Insurance Institute for Highway Safety

"No-Fault" Automobile Insurance

A major change in the biggest single line of property and casualty insurance—automobile insurance—has been in the making since the early 1970s. Widespread dissatisfaction with the operation of the traditional tort liability system, under which recoveries by accident victims of their losses are often dependent upon proving who caused the accident, has led to the adoption of "first-party" laws by about half the states and consideration of similar action by most of the other states.

A number of states have enacted laws mandating the purchase of auto liability insurance and a form of "no-fault" insurance which permits accident victims to recover such financial losses as medical and hospital expenses and lost income from their own insurance companies. Most of those states also have some restrictions on the right to sue. Several other state laws make optional the purchase of "first party" coverages up to specified minimum limits.

Among the states which have adopted forms of "no-fault" auto insurance, the major variations involve: dollar limits on medical and hospital expenses (unlimited in some states), funeral and burial expenses, lost income and the amount to be paid a person hired to perform essential services that an injured non-income producer is unable to perform; also, conditions governing the right to sue which usually include death, serious injury and a point at which medical expenses reach a stipulated amount.

Jurisdictions which have forms of "first-party" auto insurance and the dates on which the laws originally became effective, follow.

Compulsory first-party/liability insurance; some restrictions on lawsuits

Colorado, April 1, 1974	Kentucky, July 1, 1975	New York, February 1, 1974
Connecticut, January 1, 1973	Massachusetts, January 1, 1971	North Dakota, January 1, 1975
Georgia, March 1, 1975	Michigan, October 1, 1973	Utah, January 1, 1974
Hawaii, September 1, 1974	Minnesota, January 1, 1975	
Kansas, January 1, 1974	New Jersey, January 1, 1973	

Compulsory first-party, optional liability insurance; some restrictions on lawsuits

Florida, January 1, 1972	Puerto Rico, 1970	

Compulsory first-party and liability insurance; no restrictions on lawsuits

Delaware, January 1, 1972	Oregon, January 1, 1972	Pennsylvania, October 1, 1984*
Maryland, January 1, 1973		

Compulsory liability, optional first-party insurance; no restrictions on lawsuits

Arkansas, July 20, 1987	South Carolina, October 1, 1974	Texas, June 17, 1981
District of Columbia, June 3, 1986**		

Insurance not compulsory; first-party benefits optional, no restrictions on lawsuits

New Hampshire, October 1, 1971	Virginia, January 1, 1972	Wisconsin, May 18, 1972
South Dakota, January 1, 1972	Washington, 1973	

*Pennsylvania's "no-fault" law, which originally included some restrictions on lawsuits, has been in effect since July 1975.
**The District's original "no-fault" law, which included some restrictions on lawsuits, had been in effect since Oct. 1, 1983.

Source: American Insurance Association

The Regulation of Insurance

The business of property and casualty insurance is subject to two powerful forms of control: a high intensity of competition among insurance companies and strict regulation state by state.

The degree of competition is reflected by the fact that in a field which is served by about 3,800 companies, no single company or group has more than 10 percent of the property/casualty insurance market. The 10 largest organizations combined had 39 percent of the market in 1987.

As a business which is inherently linked with the public interest, property/casualty insurance is closely regulated by designated authorities in every state and in other jurisdictions. Also, certain insurer activities are subject to regulation by federal agencies.

In essence, the basic charge to which the state regulatory authorities are committed is to assure the continued solvency of each company in order that it might be ready to discharge its obligation to policyholders, to ascertain that customers are neither overcharged nor unfairly discriminated against, and to regulate the business in a way that will encourage the companies to make essential insurance protection as readily available to the public as practicable.

The procedures for reviewing and effectuating property and casualty rates include, in many states, the requirement that rates be approved in advance by the regulator. In a number of other states, rate changes generally may be made without prior approval. In those states, rates are subject to the forces of competition among insurers and to subsequent review by the regulator to assure that they are not inadequate, excessive or unfairly discriminatory.

Greater reliance on price competition is the objective of a model rating law adopted in December 1980 by the National Association of Insurance Commissioners (NAIC), the organization of state regulators. With some variations, the NAIC followed recommendations of an advisory committee of insurance buyers, consumer representatives and insurance people, which had been charged with studying the merits of competitive pricing. The committee pointed to "properly structured" price competition as "the most effective way to assure the availability of property/casualty insurance at costs that are fair, reasonable and not excessive."

The State Insurance Commissioners

Alabama: Mike Weaver, Commissioner of Insurance, 135 South Union St., Montgomery, Ala. 36130-3401. Tel. 205-269-3550.

Alaska: Paul Roller, Director of Insurance, P.O. Box "D", Juneau, Alaska 99811. Tel. 907-465-2515.

American Samoa: Afa Roberts, Insurance Commissioner, Office of the Governor, Pago Pago, American Samoa 96797. Tel. 684-633-4116.

Arizona: Susan Gallinger, Director of Insurance, 3030 North 3rd St., Phoenix, Ariz. 85012. Tel. 602-255-5400.

Arkansas: Robert M. Eubanks III, Insurance Commissioner, 400 University Tower Building, 12th and University Streets, Little Rock, Ark. 72204. Tel. 501-371-1325.

California: Roxani Gillespie, Commissioner of Insurance, 100 Van Ness Ave., San Francisco, Calif. 94102. Tel. 415-557-1126; 800-233-9045.

Colorado: John Kezer, Commissioner of Insurance, 303 W. Colfax Ave., Fifth Floor, Denver, Colo. 80204. Tel. 303-620-4300.

Connecticut: Peter E. Kelly, Insurance Commissioner, 165 Capitol Ave., State Office Bldg., Room 425, Hartford, Conn. 06106. Tel. 203-566-5275.

Delaware: David N. Levinson, Insurance Commissioner, 841 Silver Lake Blvd., Dover, Del. 19901. Tel. 302-736-4251; 800-282-8611.

District of Columbia: Marguerite C. Stokes, Superintendent of Insurance, 613 G St., N.W., 6th Floor, Washington, D.C. 20001. Tel. 202-638-5318.

Florida: William D. Gunter, Insurance Commissioner, State Capitol, Plaza Level 11, Tallahassee, Fla. 32399-0300. Tel. 904-488-3440; 800-342-2762.

Georgia: Warren D. Evans, Insurance Commissioner, 2 Martin L. King, Jr. Dr., Floyd Memorial Building, 704 West Tower, Atlanta, Ga. 30334. Tel. 404-656-2056.

Guam: Joaquin G. Blaz, Acting Insurance Commissioner, P.O. Box 2796, Agana, Guam 96910. Tel. 011-671-477-1040.

Hawaii: Robin Campaniano, Insurance Commissioner, P.O. Box 3614, Honolulu, Hawaii 96811. Tel. 808-548-5450; 800-548-5450.

Idaho: Anthony Fagiano, Director of Insurance, 500 S. 10th St., Boise, Idaho 83702. Tel. 208-334-2250.

Illinois: John E. Washburn, Director of Insurance, 320 W. Washington St., 4th Floor, Springfield, Ill. 62767. Tel. 217-782-4515.

Indiana: Harry E. Eakin, Commissioner of Insurance, 311 West Washington St., Suite 300, Indianapolis, Ind. 46204-2787. Tel. 317-232-2386; 800-622-4461.

Iowa: William D. Hager, Commissioner of Insurance, Lucas State Office Building, 6th Floor, Des Moines, Iowa, 50319. Tel. 515-281-5705.

Kansas: Fletcher Bell, Commissioner of Insurance, 420 South West Ninth St., Topeka, Kan. 66612. Tel. 913-296-3071; 800-432-2484.

Kentucky: Leroy L. Morgan, Insurance Commissioner, 229 West Maine St., P.O. Box 517, Frankfort, Ky. 40602. Tel. 502-564-3630.

Louisiana: Doug Green, Commissioner of Insurance, 950 North 5th St., Baton Rouge, La. 70801. Tel. 504-342-5328.

Maine: Joseph A. Edwards, Superintendent of Insurance, State House, Station 34, Augusta, Maine 04333. Tel. 207-582-8707.

Maryland: E. Susan Kellogg, Insurance Commissioner, 501 St. Paul Pl., 7th Floor South, Baltimore, Md. 21202. Tel. 301-333-2520; 800-492-6116.

Massachusetts: Roger Singer, Commissioner of Insurance, 280 Friend St., Boston, Mass. 02114. Tel. 617-727-3357.

Michigan: Dhirha Shah, Acting Insurance Commissioner, 611 West Ottawa St., 2nd floor, Lansing, Mich. 48933. Tel. 517-373-9273.

Minnesota: Michael A. Hatch, Commissioner of Commerce, 500 Metro Square Building, 5th Floor, St. Paul, Minn. 55101. Tel. 612-296-6848; 800-652-9747.

Mississippi: George Dale, Commissioner of Insurance, 1804 Walter Sillers Building, P.O. Box 79, Jackson, Miss. 39205. Tel. 601-359-3569.

Missouri: Larry C. Call, Director of Insurance, 301 W. High St. 6 North, P.O. Box 690, Jefferson City, Mo. 65102-0690. Tel. 314-751-2451.

Montana: Andrea Bennett, Commissioner of Insurance, 126 North Sanders, Mitchell Building, Rm. 270, P.O. Box 4009, Helena, Mont. 59604. Tel. 406-444-2040; 800-332-6148.

Nebraska: William H. McCartney, Director of Insurance, Terminal Bldg., 941 O St., Suite 400, Lincoln, Neb. 68508. Tel. 402-471-2201.

Nevada: David A. Gates, Commissioner of Insurance, Nye Building, 201 South Fall St., Carson City, Nev. 89701. Tel. 702-885-4270; 800-992-0900.

New Hampshire: Louis E. Bergeron, Insurance Commissioner, 169 Manchester St., Concord, N.H. 03301. Tel. 603-271-2261; 800-852-3416.

New Jersey: Kenneth D. Merin, Commissioner of Insurance, 20 West State St., Trenton, N.J. 08625. Tel. 609-292-5363.

New Mexico: Fabian Chavez, Superintendent of Insurance, PERA Building, P.O. Drawer 1269, Sante Fe, N.M. 87504-1269. Tel. 505-827-4500.

New York: James P. Corcoran, Superintendent of Insurance, 160 W. Broadway, New York, N.Y. 10013. Tel. 212-602-0429; 800-522-4370.

North Carolina: James E. Long, Commissioner of Insurance, Dobbs Building, P.O. Box 26387, Raleigh, N.C. 27611. Tel. 919-733-7343; 800-662-7777.

North Dakota: Earl R. Pomeroy, Commissioner of Insurance, Capitol Building, Fifth Floor, Bismarck, N.D. 58505. Tel. 701-224-2440; 800-247-0560.

Ohio: George Fabe, Director of Insurance, 2100 Stella Court, Columbus, Ohio 43266-0566. Tel. 614-644-2658; 800-282-4658.

Oklahoma: Gerald Grimes, Insurance Commissioner, 1901 N. Walnut St., Oklahoma City, Okla. 73105. Tel. 405-521-2828.

Oregon: Theodore R. Kulongoski, Insurance Commissioner, 21 Labor and Industry Bldg., Salem, Ore. 97310. Tel. 503-378-4271.

Pennsylvania: Constance B. Foster, Insurance Commissioner, Strawberry Square, 13th Floor, Harrisburg, Pa. 17120. Tel. 717-787-5173.

Puerto Rico: Juan Antonio Garcia, Commissioner of Insurance, Fernandez Juncos Station, P.O. Box 8330, Santurce, P.R. 00910. Tel. 809-722-8686.

Rhode Island: Mark A. Pfeiffer, Insurance Commissioner, 233 Richmond St., Providence, R.I. 02903. Tel. 401-277-2246.

South Carolina: John G. Richards V, Chief Insurance Commissioner, 1612 Marion St., P.O. Box 100105, Columbia, S.C. 29202-3105. Tel. 803-737-6117.

South Dakota: Mary Jane Cleary, Director of Insurance, Insurance Building, 910 E. Sioux Ave., Pierre, S.D. 57501. Tel. 605-773-3563.

Tennessee: Elaine A. McReynolds, Commissioner of Insurance, 500 James Robertson Pkwy. 5th Floor, Nashville, Tenn. 37219-5318. Tel. 615-741-2241; 800-342-4029.

Texas: Doyce R. Lee, Commissioner of Insurance, 1110 San Jacinto Blvd., Austin, Tex. 78701-1998. Tel. 512-463-6464.

Utah: Harold C. Yancey, Commissioner of Insurance, P.O. Box 45803, Salt Lake City, Utah 84145. Tel. 801-530-6400.

Vermont: Gretchen Babcock, Commissioner of Insurance, State Office Building, 120 State St., Montpelier, Vt. 05602. Tel. 802-828-3301.

Virgin Islands: Derek M. Hodge, Commissioner of Insurance, Kangens Garde #18, St. Thomas, Virgin Islands 00801. Tel. 809-774-2991.

Virginia: Steven T. Foster, Commissioner of Insurance, 700 Jefferson Building, P.O. Box 1157, Richmond, Va. 23209. Tel. 804-786-3741; 800-552-7945.

Washington: Richard G. Marquardt, Insurance Commissioner, Insurance Building, AQ21, Olympia, Wash. 98504. Tel. 206-753-7301. 800-562-6900.

West Virginia: Hanley Clark, Deputy Insurance Commissioner, 2019 Washington St., East, Charleston, W.Va. 25305. Tel. 304-348-3394; 800-642-9004.

Wisconsin: Robert D. Haase, Commissioner of Insurance, 123 W. Washington Ave., Madison, Wis. 53702. Tel. 608-266-0102.

Wyoming: Gordon W. Taylor, Insurance Commissioner, Herschler Building, 122 W. 25th St., Cheyenne, Wyo. 82002. Tel. 307-777-7401.

Definitions

Insurance: A system under which individuals, businesses and other organizations or entities, in exchange for payment of a sum of money (a premium), are guaranteed compensation for losses resulting from certain perils under specified conditions.

Property Insurance: Insurance providing financial protection against the loss of, or damage to, real and personal property caused by such perils as fire, theft, windstorm, hail, explosion, riot, aircraft, motor vehicles, vandalism, malicious mischief, riot and civil commotion, and smoke.

Casualty Insurance: Insurance concerned primarily with the insured's legal liability for injuries to others or for damage to other persons' property; also encompasses such forms of insurance as plate glass, burglary, robbery and workers' compensation.

Liability Insurance: Insurance covering the policyholder's legal liability resulting from injuries to other persons or damage to their property.

Life Insurance: Insurance providing for payment of a specified amount on the insured's death, either to his or her estate or to a designated beneficiary; or in the case of an endowment policy, to the policyholder at a specified date.

Accident and Health Insurance: A type of coverage that pays benefits, sometimes including reimbursement for loss of income, in case of sickness, accidental injury or accidental death.

Actual Cash Value: In many insurance policies, the amount awarded for physical damage losses; commonly defined as replacement cost less depreciation.

Agent: The *independent agent* is an independent business person who usually represents two or more insurance companies in a sales and service capacity and who is paid on a commission basis. The *exclusive agent* represents only one company, usually on a commission basis. The *direct writer* is the salaried or commissioned employee of a single company.

Allied Lines: A term for forms of insurance allied with property insurance, covering such perils as sprinkler leakage, water damage and earthquake.

Arson: The willful and malicious burning of, or attempt to burn, any structure or other property, often with criminal or fraudulent intent.

Assets: As applicable to insurance, all funds, property, goods, securities, rights of action or resources of any kind owned by an insurance company, less such items as are declared non-admissible for accounting purposes by state laws, including deferred or overdue premiums.

Automobile Insurance Plan: One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market.

Automobile Liability Insurance: Protection for the insured against financial loss because of legal liability for car-related injuries to others or damage to their property.

Automobile Physical Damage Insurance: Coverage to pay for damage to or loss of policyholder's automobile resulting from collision, fire, theft, or other perils.

Automobile Reinsurance Facility: One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market.

Automobile Shared Market: A program in which all automobile insurers in each state and the District of Columbia participate to make coverage available to car owners who are unable to obtain auto insurance in the regular market. Except in Maryland, which operates a state-funded mechanism whose losses are subsidized by private insurers, each state uses one of three systems (an automobile insurance plan, a joint underwriting association or a reinsurance facility) to guarantee the availability of automobile insurance.

Aviation Insurance: Insurance pertaining to aircraft, including coverage of aircraft or their contents, the owner's liability or accident insurance on the passengers.

Boiler and Machinery Insurance: Coverage for loss arising out of the operation of pressure, mechanical and electrical equipment. It covers loss of the boiler and machinery itself, damage to other property, and business interruption losses.

Broker: A marketing specialist who represents buyers of property and liability insurance and who deals with either agents or companies in arranging for the coverage required by the customer.

Burglary: Breaking and entering into another person's property with felonious intent.

Burglary and Theft Insurance: Coverage against property losses due to burglary, robbery or larceny.

Business Interruption Insurance: Protection for a business owner against losses resulting from a temporary shutdown because of fire or other insured peril. The insurance provides reimbursement for lost net profits and necessary continuing expenses.

Catastrophe: In insurance, a term applied to an incident or series of related incidents causing insured property losses totaling more than $5 million.

Claim: A demand to recover under an insurance policy for a loss covered by that policy.

Coinsurance: A provision in an insurance policy under which the insured agrees to carry a certain amount of insurance expressed as a percentage of the value of the property. It provides for the full payment, up to the amount of the policy, of all losses if the insurance carried is at least equal to the specified percentage. If the insured fails to carry the necessary amount of insurance, he or she assumes a proportionate share of the loss.

Collision Insurance: An automobile insurance coverage against damage to the policyholder's vehicle caused by collision with another car or object or by upset.

Combined Ratio: Basically, a measure of the relationship between dollars paid out in claims and expenses and dollars taken in in premiums; more specifically, the sum of the ratio of losses incurred to premiums earned and the ratio of commissions and expenses incurred to premiums written.

Commercial Lines: Insurance for businesses, organizations, institutions, governmental agencies or other commercial establishments.

Commercial Multiple Peril Policy: A package type of insurance that includes a wide range of essential coverages for the commercial establishment.

Commissioner: A state officer for administering the state's insurance laws and regulations. In some states, the regulator bears the title of director or superintendent of insurance.

Comprehensive Personal Liability Insurance: Protection for an insured against loss arising out of legal liability to pay money for damage or injury to others for which the insured is responsible. Does not include automobile liability or business operations.

Compulsory Insurance: Any form of insurance which is required by law.

Coverage: The scope of protection provided under a contract of insurance; any of several risks covered by a policy.

Credit Insurance: A guarantee to manufacturers, wholesalers and service organizations that they will be paid for goods shipped or services rendered. Applies to that part of working capital which is represented by accounts receivable.

Crop-Hail Insurance: Protection against damage to growing crops as a result of hail or certain other named perils.

Deductible: An amount which a policyholder agrees to pay, per claim or per accident, toward the total amount of an insured loss. Insurance is written on this basis at reduced rates.

Dividend: (1) An amount returned to a policyholder by an insurance company out of its earnings. (2) In capital stock companies, a share of profits distributed to stockholders.

Earned Premium: The portion of a premium which is the property of an insurance company, based on the expired portion of the policy period.

Earthquake: A trembling or shaking of the earth, often resulting in severe damage.

Economic Loss: The estimated total cost, both insured and uninsured, of mishaps (such as motor vehicle accidents, work accidents and fires). Includes such factors as property damage; medical, hospital and legal costs; funeral expenses; wage loss, and insurance administrative costs.

Embezzlement: Fraudulent use or taking of another's property or money which has been entrusted to one's care.

Extended Coverage Insurance: Protection for the insured against property damage caused by windstorm, hail, smoke, explosion, riot, riot attending a strike, civil commotion, vehicle and aircraft. This is provided in conjunction with the fire insurance policy and the various "package" policies.

FAIR Plan: A facility, operating under a government-insurance industry cooperative program, to make fire insurance and other forms of property insurance readily available to persons who have difficulty obtaining such coverage.

Farmowners-Ranchowners Policy: A package policy for a farm or a ranch, providing property and liability coverages against both personal and business losses.

Federal Crime Insurance: Insurance against burglary, larceny and robbery losses offered by the federal government where the Federal Insurance Administration has determined that an insurance availability problem exists.

Fidelity Bond: A form of protection which reimburses an employer for losses caused by dishonest or fraudulent acts of employees.

Financial Responsibility Law: A state law under which a person involved in an automobile accident may be required to furnish security up to certain minimum dollar limits.

Fire Insurance: Coverage for losses caused by fire and lightning, plus resultant damage caused by smoke and water.

Flood Insurance: Coverage against loss resulting from the flood peril.

General Liability Insurance: Coverage that pertains, for the most part, to claims arising out of the insured's liability for injuries or damage caused by ownership of property, manufacturing operations, contracting operations, sale or distribution of products, and the operation of elevators and the like, as well as professional services.

Glass Insurance: Protection for loss of or damage to glass and its appurtenances.

Group Insurance: Any insurance plan under which a number of persons and their dependents are insured under a single policy, issued to their employer or to an association with which they are affiliated.

Guaranty Fund: A fund, derived from assessments against solvent insurance companies, to absorb losses of claimants against insolvent companies.

Health Insurance: Insurance against financial losses resulting from sickness or accidental bodily injury.

Homeowners Policy: A package type of insurance providing home owners with a broad range of property and liability coverages.

Hurricane: A tropical storm with a wind velocity of 75 or more miles an hour.

Inland Marine Insurance: A broad form of insurance, generally covering articles that may be transported from one place to another as well as bridges, tunnels and other instrumentalities of transportation and communication. It includes goods in transit (generally excepting trans-ocean) as well as numerous "floater" policies such as those covering personal effects, personal property, jewelry, furs, fine arts and others.

Insurance Company: An organization chartered to operate as an insurer.

Insured: Person or organization covered by an insurance policy, including the "named insured" and any other parties for whom protection is provided under the policy terms.

Investment Income: The portion of a company's income which is derived from its investments, including interest and dividends on stocks and bonds.

Joint Underwriting Association: One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market. JUAs also have been created in some states to help alleviate availability problems in the fields of medical malpractice and commercial insurance.

Larceny-Theft: The unlawful taking, carrying, leading or riding away of another person's property.

Liability: Any legally enforceable obligation.

Liability Limits: The stipulated sum or sums beyond which an insurance company is not liable to protect the insured.

Loss: The basis on which an insurance claim is submitted and/or paid.

Malpractice Insurance: Coverage for a professional practitioner, such as a doctor or a lawyer, against liability claims resulting from alleged malpractice in the performance of the insured's services.

Marine Insurance: A form of insurance primarily concerned with instruments of transportation and communication, and with goods in transit. See also Inland Marine Insurance and Ocean Marine Insurance.

Medical Payments Insurance: A coverage, available in various liability insurance policies, in which the insurer agrees to reimburse the insured and others, without regard for the insured's liability, for medical or funeral expenses incurred as the result of bodily injury or death by accident under specified conditions.

Net Underwriting Profit or Loss: Statutory underwriting profit less (or loss plus) dividends to policyholders.

No-fault Automobile Insurance: A form of insurance by which a person's financial losses resulting from an automobile accident, such as medical and hospital expenses and loss of income, are paid by his or her own insurer regardless of who was at fault.

Ocean Marine Insurance: Coverage for sea-going vessels, including liabilities connected with them, and their cargoes.

Package Policy: A single insurance policy that includes several coverages.

Peril: The cause of a loss insured against in a policy.

Personal Lines: Those types of insurance, such as auto or home insurance, for individuals or families rather than for businesses or organizations.

Policy: A contract of insurance.

Policyholder: A person who pays a premium to an insurance company in exchange for the insurance protection provided by a policy of insurance.

Policyholder's Surplus: Sum left after liabilities are deducted from assets. Sums such as paid-in capital and special voluntary reserves are also included in this term. This surplus is an additional financial protection to policyholders in the event a company suffers unexpected or catastrophic losses. In effect, it is the financial base that permits a company to sell insurance.

Pool: An organization of insurers or reinsurers through which particular types of risk are underwritten with premiums, losses and expenses shared in agreed-upon amounts.

Premium: The sum paid for an insurance policy. *Net premiums written* represent premium income retained by insurance companies, direct or through reinsurance, less payments made for business reinsured. *Direct written premiums* are the amounts actually paid by policyholders.

Premium Tax: A tax, imposed by each state, on gross income of insurers doing business in a state.

Product Liability Insurance: Protection against financial loss arising out of the legal liability incurred by a manufacturer, merchant or distributor because of injury or damage resulting from the use of a covered product.

Rate: The pricing factor upon which the insurance buyer's premium is based.

Regulation: Supervision of business practices by a governmental entity.

Reinsurance: Assumption by one insurance company of all or part of a risk undertaken by another insurance company.

Reserve: (1) An amount representing actual or potential liabilities kept by an insurer to cover obligations to policyholders. (2) An amount allocated for a special purpose. Note that a reserve is usually a liability and not an extra fund. On occasion a reserve may be an asset, such as a reserve for taxes not yet due.

Risk: The chance of loss. Also used to refer to the insured or to property covered by a policy.

Robbery: The taking of property from a person by force or by threat of violence.

State Fund: A fund set up by a state government to provide insurance. Some statutes permit, others exclude, competition by private insurers.

Statutory Underwriting Profit or Loss: Premiums earned less losses and expenses.

Surety Bond: An agreement providing for monetary compensation in the event of a failure to perform specified acts within a stated period. The surety company, for example, becomes responsible for fulfillment of a contract if the contractor defaults.

Surplus Lines: (1) A risk or a part of a risk for which there is no normal insurance market available. (2) Insurance written by non-admitted insurance companies.

Tornado: A whirling wind, accompanied by a funnel-shaped cloud, very violent and destructive in a narrow path, often for many miles over the land.

Tort: A wrongful act, resulting in injury or damage, on which a civil action may be based. Does not apply to a breach of contract.

Umbrella Liability: Covers losses in excess of amounts covered by other liability insurance policies; also protects the insured in many situations not covered by the usual liability policies.

Underwriting: The process of selecting risks for insurance and determining in what amounts and on what terms the insurance company will accept the risk.

Underwriting Profit or Loss: The amount of money which an insurance company gains or loses as a result of its underwriting operations. A net gain or loss on underwriting operations represents a company's statutory underwriting profit less (or loss plus) any amount it may pay to its policyholders in the form of dividends.

Unearned Premium: The portion of a premium that a company has collected but has yet to earn because the policy still has unexpired time to run.

Uninsured Motorist Protection: A form of insurance which covers the policyholder and family members if injured by a hit-and-run motorist or a driver who carries no liability insurance, assuming the other driver is at fault.

Workers' Compensation Insurance: A method of providing for the cost of medical care and weekly payments to injured employees or to dependents of those killed in industry, regardless of blame.

Insurance and Service Organizations

The following organizations are supported by insurance companies or have activities closely related to insurance. National and state organizations which subscribe to the services of the Insurance Information Institute are identified by an asterisk(*).

Robert E. Merriman, acting president, One North Broadway, White Plains, N.Y. 10601. Tel. 914-682-0800. An industry-sponsored institute serving as the focal point for improving the processing of insurance transactions through the insurance agency system.

Franklin W. Nutter, president, 1501 Woodfield Rd., Suite 400 West, Schaumburg, Ill. 60173-4980. Tel. 312-330-8500. Trade association to facilitate cooperation among fire and casualty insurance companies in matters of concern to them and their policyholders.

Donald W. Segraves, executive director, 1200 Harger Rd., Suite 310, Oakbrook, Ill. 60521. Tel. 312-572-1177. Provides the public and the insurance industry with timely research information relevant to public policy issues affecting risk and insurance.

Gary D. Simms, interim executive director, 1720 I St., N.W., 7th Floor, Washington, DC. 20006. Tel. 202-223-8196. Professional association for actuaries. Issues standards of conduct and provides government liaison and advisory opinions.

E. Eugene Gantz, executive vice president, 2501 M St., N.W., Washington, DC. 20037. Tel. 202-463-0541. National trade association of insurance companies to promote crop insurance.

Paul A. Bauocchi, president and chief executive officer, 1035 S. York Rd., Bensenville, Ill. 60106. Tel. 312-595-3225. Rating, statistical and advisory organization for personal and commercial lines of insurance with membership composed principally of small and medium size companies.

Jerry Fogel, executive vice president, 9140 Ward Parkway, Kansas City, Mo. 64114. Tel. 816-444-3500. Managing general agents of insurers.

Richard S. Schweiker, president, 1001 Pennsylvania Ave., N.W., Suite 500, Washington, DC. 20004. Tel. 202-624-2000. Trade association responsible for the public relations, government, legislative and research aspects of the life insurance business.

Ward L. Marsh, president, 14 Wall St., New York, N.Y. 10005. Tel. 212-233-0550. Provides information of interest to marine underwriters and promotes their interests.

Dr. Norman A. Baglini, CPCU, CLU, president, 720 Providence Rd., Malvern, Pa. 19355-0770. Tel. 215-644-2100. Developed the Chartered Property Casualty Underwriter (CPCU) professional designation program and administers national CPCU examinations.

Robert E. Vagley, president, 1130 Connecticut Ave., N.W., Suite 1000, Washington, DC. 20036. Tel. 202-828-7100. Trade and service organization of the property and casualty insurance industry; provides a forum for the discussion of problems, provides safety, promotional and legislative services.

Lawrence M. Zippin, president, 85 John St., New York, N.Y. 10038. Tel. 212-669-0400. Wholly owned subsidiary of the American Insurance Association, administers five industry service organizations, the Index System, Property Insurance Loss Register, Premium Audit Advisory Service, Property Claim Services and Engineering & Safety Service.

James Maher, executive vice president, 1828 L St., N.W., Suite 705, Washington, DC. 20036. Tel. 202-296-3671. Trade organization for title insurers, abstractors and agents. Performs statistical research and lobbying services.

Burt C. Proom, president, The Exchange, Suite 245, 270 Farmington Ave., Farmington, Conn. 06032. Tel. 203-677-7305. A nonprofit unincorporated association through which liability and property insurance protection is provided against hazards arising out of nuclear reactor installations and their operations.

Alec M. Schwartz, executive director, 750 North Lake Shore Drive, Chicago, Ill. 60611. Tel. 312-988-5751. National membership organization to provide information and technical assistance to lawyers, insurance companies, administrators, marketers and consumers regarding group and prepaid legal service plans.

Bernard L. Hines Jr., president, Talleyrand I, 200 White Plains Rd., Tarrytown, N.Y. 10591-0966. Tel. 914-332-4770. Industry-supported nonprofit organization to arbitrate inter-company disputes.

Association of Fire and Casualty Companies of Texas. D.E. Walker, AFACT, executive manager, c/o Highlands Insurance Co., 600 Jefferson St., Houston, Tex. 77002. Tel. 713-659-5541. Represents domestic Texas property and liability insurance companies in seeking to broaden consumer knowledge of insurance and in supporting legislation to improve the insurance business.

Automobile Insurance Plans Service Office. John J. Corbles, president, 302 Central Ave., Johnston, R.I. 02919. Tel. 401-946-2310. Develops and files rates and provides other services for automobile insurance plans.

Casualty Actuarial Society. Kevin M. Ryan, president, One Penn Plaza, New York, N.Y. 10119. Tel. 212-560-1018/09. Promotes actuarial and statistical science in all insurance fields except life.

College of Insurance. Dr. Ellen Thrower, president and chief executive, 1 Insurance Plaza, 101 Murray St., New York, N.Y. 10007. Tel. 212-962-4111. Insurance industry-supported college providing a curriculum leading to bachelor's and master's degrees in business administration, insurance, financial services and actuarial science.

Conference of Insurance Legislators. Charles Davis, executive director, P.O. Box 217, Brookfield, Wis. 53008. Tel. 414-782-6669. Organization of chairmen of state legislative committees concerned with insurance-related matters.

Crop-Hail Insurance Actuarial Association. Lloyd W. Lindstrom, manager, 7301 College Blvd., Suite 170, Overland Park, Kans. 66210. Tel. 913-451-0980. Rating and research organization and statistical agent for crop-hail insurance and rain insurance on public events, business ventures, and private proceedings.

Crop Insurance Research Bureau. Henry A. Butler, president, 3707 Woodview Trace, Box 68700, Indianapolis, Ind. 46268. Tel. 317-875-5250. Crop insurance trade organization.

Defense Research Institute, Inc. Louis L. Potter, executive director, 750 North Lake Shore Drive, Suite 500, Chicago, Ill. 60611. Tel 312-944-0575. Service organization to improve the administration of justice and the skills of defense lawyers.

Federal Insurance Administration. Harold T. Duryee, administrator, 500 C St., SW., Washington, DC. 20472. Tel. 202-646-2781. Administers the federal flood insurance and crime insurance programs.

Fire Prevention and Engineering Bureau of Texas. Richard A. Comstock, manager, 1900 Pacific Building, Suite 720, Dallas, Tex. 75201. Tel. 214-969-0330. Performs risk inspections, prepares underwriting reports, inspects fire defenses of Texas cities for members and subscribers.

Foreign Credit Insurance Association. John Hanson, president, 40 Rector St., 11th Floor, New York, N.Y. 10006. Tel. 212-306-5000. Offers credit insurance facilities for U.S. exporters through cooperation of the insurance business and the Export-Import Bank of Washington.

Health Insurance Association of America. Carl J. Schramm, president, 1025 Connecticut Ave., NW., Suite 1200, Washington, DC. 20036. Tel. 202-223-7780. Central source of health insurance information for the public on behalf of insurance companies; monitors public attitudes and reactions to health insurance developments.

Highway Loss Data Institute. Brian O'Neill, president, Watergate Six Hundred, Suite 300, Washington, DC. 20037. Tel. 202-333-6200. Nonprofit organization to gather, process and provide the public with insurance data concerned with human and economic losses resulting from highway accidents.

ISO Commercial Risk Services, Inc. B. Joseph Shelley, president, 2 Sylvan Way, Parsippany, N.J. 07054. Tel. 201-267-0359. A wholly-owned subsidiary of Insurance Services Office, Inc., providing individual property survey and rating information to the property/casualty industry.

ISO Telecommunications, Inc. Domanick R. Cortellessa, president, 160 Water St., New York, N.Y. 10038. Tel. 212-487-5000. A wholly-owned subsidiary of Insurance Services Office, Inc., established to telecommunicate ISO products and services to ISO-participating insurers.

Independent Insurance Agents of New York, Inc. Jeffrey M. Yates, executive vice president, 100 Church St., New York, N.Y. 10007. Tel. 212-285-4250. Trade association of independent insurance agents.

Inland Marine Underwriters Association. Ward L. Mauck, president, 14 Wall St., New York, N.Y. 10005. Tel. 212-233-7958. Forum for discussion of problems of common concern to inland marine insurers.

Institute for Civil Justice. Dr. Kevin McCarthy, director, 1700 Main St., P.O. Box 2138, Santa Monica, Calif. 90406-2138. Tel. 213-393-0411. Organization formed within the Rand Corporation to perform independent, objective research and analysis concerning the civil justice system.

Insurance Accounting and Systems Association. Elaine Powell, secretary-treasurer, P.O. Box 51340, Durham, N.C. 27717. Tel. 919-489-0991. An international organization to promote the study, research and development of modern techniques in insurance accounting and statistics.

Insurance Committee for Arson Control. Rick Gilman, executive director, 110 William St., New York, N.Y. 10038. Tel 212-669-9265. All-industry coalition; serves as a catalyst for insurers' anti-arson efforts and a liaison with government agencies and other groups devoted to arson control.

Insurance Crime Prevention Institute. Wendall C. Harness, director, 15 Franklin St., Westport, Conn. 06880. Tel. 203-226-6347. Serves property and casualty insurers in the investigation of fraudulent insurance claims, other than accident, health and workers' compensation.

Insurance Fund Foundation, Vance Fredrickson, president, 1218 Third Ave., Seattle, Wash. 98101. Tel.206-624-3927. Provides educational programs and materials to teachers, students and the general public.

Insurance Information Institute, Mechlin D. Moore, president, 110 William St., New York, N.Y. 10038. Tel. 212-669-9200. An educational, fact-finding and communications organization for all lines of insurance except life and health insurance. It is supported by some 300 insurance companies and provides services on a subscribership basis to many major industry organizations.

Insurance Institute for Highway Safety, Brian O'Neill, president, Watergate Six Hundred, Suite 300, Washington, D.C. 20037. Tel. 202-333-0770. Traffic safety organization supported by automobile insurers.

Insurance Institute of America, Inc., Dr. Norman A. Baglini, CPCU, CLU, president, 720 Providence Rd, Malvern, Pa. 19355-0770. Tel. 215-644-2100. Provides educational opportunities to property and liability insurance and related fields; provides standards for measurement of achievement through the administration of national examinations.

Insurance Library Association of Boston, Maurice H. Saval, chairman, 156 State St., Boston, Mass. 02109. Tel. 617-227-2087. A nonprofit, independent membership library serving the research and education interests of all branches of the insurance industry.

*Insurance Services Office, Inc., Fred R. Marcon, president, 175 Water St., New York, N.Y. 10038. Tel. 212-487-5000. Provides a wide range of advisory, rating, actuarial, statistical and other services relating to property and casualty insurance, including the development of policy forms, rates, premiums and related services for monoline and multiple line coverages. Offers services, including research studies, to insurers or other persons or organizations.

Insurance Value Added Network Services, Robert Barham, president, One North Broadway, White Plains, N.Y. 10601. Tel. 914-684-0343. An industry-sponsored organization offering a value added data communications network linking agencies, companies and providers of data to the insurance industry.

*International Insurance Council, Gordon J. Cloney, president, 1625 K St., N.W., Suite 1075, Washington, D.C. 20006. Tel. 202-331-7221. Speaks for and coordinates the international noncommercial activities of U.S. insurance and reinsurance companies.

*Kansas Association of Property and Casualty Insurance Companies, L.M. Cornish, secretary-treasurer, P.O. Box 1280, Topeka, Kan. 66601. Tel. 913-232-0545. Represents 17 domestic insurers in Kansas.

Kansas Insurance Education Foundation, Glen Davis, chairman of the board of trustees, P.O. Box 1280, Topeka, Kan. 66601. Tel. 913-232-0545. Nonprofit organization devoted to promotion and encouragement of insurance education in Kansas. Develops teaching aids, supports insurance education at the university level and prepares and distributes consumer information.

LOMA (Life Office Management Association), Lynn Merritt, president, 5770 Powers Ferry Rd., Atlanta, Ga. 30327. Tel. 404-951-1770. Worldwide association of insurance companies specializing in research and education, with a primary focus on home office management.

*Loss Executives Association, Daniel Hanke, president, c/o Church Insurance Co., 800 Second Avenue, New York, N.Y. 10017. Tel. 212-661-6700. A professional association of property loss executives providing education to the industry.

*Metropolitan Chicago Loss Bureau, Robert Kissane, president, 343 S. Dearborn, Suite 1400, Chicago, Ill. 60604. Tel. 312-322-2500. Assists insurance companies with property claims adjustment and arson and fraud claims investigation.

National Association of Casualty and Surety Agents, Bruce T. Wallace, executive vice president, 6931 Arlington Rd., Suite 308, Bethesda, Md. 20814. Tel. 202-986-4166. A trade organization dedicated to safeguarding the public interest, preserving a competitive market, and working with others for the good of the insurance business and the public.

National Association of Casualty and Surety Executives, Lawrence M. Zippin, executive secretary, 85 John St., New York, N.Y. 10038. Tel. 212-669-0400. Organization to provide insurance companies and agents with a forum for discussion of industry problems relating to the public's interest.

National Association of Health Underwriters, William F. Flood, executive vice president, 1000 Connecticut Ave., N.W., Suite 1111, Washington, D.C. 20006. Tel. 202-223-5533. Professional association of persons engaged in the sale and service of disability income and hospitalization and major medical health insurance.

National Association of Independent Insurers, Lowell R. Beck, president, 2600 River Rd., Des Plaines, Ill. 60018. Tel. 312-297-7800. Trade association of fire, casualty and surety insurers.

National Association of Insurance Brokers, Inc., David F. Lambert III, executive director, 1401 New York Ave., N.W., Suite 720, Washington, D.C. 20005. Tel. 202-628-6700. Trade association of commercial insurance brokers.

National Association of Insurance Commissioners, Sandra L. Gilfillan, executive vice president, 12 Wyandotte Plaza, 120 W. 12th St., Suite 1100, Kansas City, Mo. 64105. Tel. 816-842-3600. Organization of state insurance commissioners to promote uniformity in state supervision of insurance matters, and to recommend legislation in the various state legislatures.

*National Association of Insurance Women. Nancy E. Utter, executive vice president, 1847 E. 15th St., P.O. Box 4410, Tulsa, Okla. 74104. Tel. 918-744-5195. Fosters educational programs for members. Promotes public safety and service programs.

National Association of Mutual Insurance Companies. Larry Forrester, president, 3707 Woodview Trace, P.O. Box 68700, Indianapolis, Ind. 46268. Tel. 317-875-5250. Trade association of property and casualty mutual insurance companies.

National Association of Professional Surplus Lines Offices, Ltd.. Richard Bouhan, executive director, 5746 N. Broadway, P.O. Box 26660, Kansas City, Mo. 64118. Tel. 816-455-3210. Professional association of wholesale brokers, excess and surplus lines companies, affiliates and supporting members.

National Association of Surety Bond Producers. Bruce T. Wallace, executive vice president, 6931 Arlington Rd., Suite 308, Bethesda, Md. 20814. Tel. 301-986-4166. Trade association of surety bond producers.

National Automobile Theft Bureau. Paul W. Gilliland, president, 10330 S. Roberts Rd. 3A, Palos Hills, Ill. 60465. Tel. 312-430-2430. Conducts stolen vehicle recovery and auto theft prevention activities.

National Committee on Insurance Guaranty Funds. Charles Zarrechi, executive secretary, 2600 River Rd., Des Plaines, Ill. 60018. Tel. 312-297-7800. Advisory organization to the state guaranty fund boards; gathers and disseminates information regarding insurer insolvencies.

*National Committee on Property Insurance. Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, Mass. 02110. Tel. 617-423-4620. Provides advice and assistance to insurers writing property coverage in distressed or residual insurance markets.

*National Council on Compensation Insurance. Kevin M. Ryan, president, One Penn Plaza, New York, N.Y. 10119. Tel. 212-560-1000. Develops and administers rating plans and systems for workers' compensation insurance.

National Crop Insurance Association. George A. Bender, executive vice president, 7301 College Blvd., Suite 250, Overland Park, Kan. 66210. Tel. 913-451-3656. National trade association of insurance companies writing hail insurance, fire insurance and insurance against other weather perils to growing crops.

National Fire Protection Association. Robert W. Grant, president, Batterymarch Park, Quincy, Mass. 02269. Tel. 617-770-3000. Independent, nonprofit source of information on fire protection, prevention and suppression; develops and publishes consensus fire safety standards; sponsors national Learn Not to Burn campaign.

National Safety Council. T.C. Gilchrest, president, 444 N. Michigan Ave., Chicago, Ill. 60611. Tel. 312-527-4800. Provides national support and leadership in the field of safety; publishes safety materials of all kinds; conducts a public information and publicity program in support of safety.

*New York Board of Fire Underwriters. Alexander Pirnie, president, 85 John St., New York N.Y. 10038. Tel. 212-227-3700. Supervises the Fire Patrol of New York City, conducts fire safety and electrical inspections, helps develop fire safety standards, and assists in the adjustment of fire insurance claims.

*New York Cooperative Insurance Association. Kurt J. English, CPCU, CLU, CAE, president, 401 S. Main St., North Syracuse, N.Y. 13212. Tel. 315-458-7702. A trade association representing 73 mutual property/casualty insurance companies providing insurance for homes, businesses and farmers.

*New York Insurance Exchange. Joseph Fahys, president and chief executive officer, 111 Fulton St., New York, N.Y. 10038. Tel. 212-618-9200. A marketplace established to write reinsurance of all kinds and direct insurance on risks located outside the United States, as well as on domestic risks which have been rejected in the New York Free Trade Zone.

*New York Property Insurance Underwriting Association. Richard G. Brueckner, president, 100 William St., New York, N.Y. 10038. Tel. 212-208-9700. Provides basic fire insurance for New York State residents not able to obtain the coverage through the voluntary market.

Overseas Private Investment Corporation. Craig A. Nalen, president, 1615 M St., N.W., Washington, D.C. 20527. Tel. 202-457-7200. Self-sustaining U.S. government agency providing political risk insurance and finance services for U.S. investment in developing countries.

Pollution Liability Insurance Association. Thomas Knowlton, president, 1333 Butterfield Rd., Suite 100, Downers Grove, Ill. 60515. Tel. 312-969-5300. Organization to promote the availability of pollution and hazardous waste insurance coverages for businesses.

Professional Insurance Agents. Donald K. Gardiner, executive vice president, 400 [illegible] Washington St., Alexandria, Va. 22314. Tel. 703-836-9340. Trade association of independent insurance a[illegible].

Property Insurance Loss Register. Gerald F. Murphy, vice president, 700 New Br[illegible]ick Ave., Rahway, N.J. 07065. Tel. 201-388-0157. A voluntary, nonprofit organization administered by the American Insurance Association; maintains a computerized registry of property loss claims which can be used by its subscribers to fight insurance fraud, and provides data for nonactuarial/statistical research.

Property Insurance Plans Service Office. Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, Mass. 02110. Tel. 617-423-4620. Provides technical and administrative services to state property insurance plans.

Public Risk and Insurance Management Association. Natalie Wasserman, executive director, 1120 G St., N.W., Washington, D.C. 20005. Tel. 202-626-4650. Membership organization representing risk managers in state and local public entities.

Reinsurance Association of America. Andre Maisonpierre, president, 1819 L St., N.W., 7th Floor, Washington, D.C. 20036. Tel. 202-293-3335. Trade association of property and casualty reinsurers; provides legislative services for members.

Risk and Insurance Management Society, Inc. Ron E. Judd, executive director, 205 E. 42nd St., New York, N.Y. 10017. Tel. 212-286-9292. Organization of corporate buyers of insurance which makes known to insurers the insurance needs of business and industry, and which supports loss prevention and provides a forum for the discussion of common objectives and problems.

Society of Certified Insurance Counselors. William T. Hold, Ph.D., CIC, CPCU, CLU, president, 3630 North Hills Dr., Austin, Tex. 78731. Tel. 512-345-7932. National education program in property, liability and life insurance, with a continuing education requirement upon designation.

Society of Chartered Property and Casualty Underwriters. Paul A. Synnott, CPCU, executive vice president, Kahler Hall, 720 Providence Rd., (CB No. 9), Malvern, Pa. 19355. Tel. 215-251-2728. Professional society to foster the higher education of those engaged in insurance and risk management; encourages and conducts research.

Society of Financial Examiners. Penney Des Pas, executive director, 1100 Raleigh Building, 5 W. Hargett St., Raleigh, N.C. 27601. Tel. 919-821-1435. Professional society for examiners of insurance companies, banks, savings and loans and credit unions.

Society of Insurance Research. Patrick L. Irish, president, Box 933, Appleton, Wis. 54912. Tel. 414-730-8858. Stimulates insurance research and fosters exchanges among society members on research methodology.

Society of Insurance Trainers and Educators. Hank Drewes, executive director, P.O. Box 513, Cary, Ill. 60013. Tel. 312-516-1921. Professional organization of trainers and educators in insurance.

***Surety Association of America.** Lloyd Provost, president, 100 Wood Ave., S. (Metro-Park), Iselin, N.J. 08830. Tel. 201-494-7600. Statistical, rating, development and advisory organization for surety companies.

***Texas Automobile Insurance Plan.** Bobby White, manager, 3755 Capital of Texas Highway South, Suite 300, Austin, Tex. 78704-7927. Tel. 512-444-4441. Provides an open market for drivers unable to obtain liability insurance through commercial channels.

***Texas Automobile Insurance Service Office.** Sherrell Kidd, manager, Suite 130, One La Costa, 1016 La Posada Dr., Austin, Tex. 78752. Tel. 512-458-6347. Insurers' organization licensed to advise the State Insurance Board on auto forms, rates, rating procedures, classifications and coverages.

***Texas Catastrophe Property Insurance Association.** James A. Douglass, manager, P.O. Box 2930, Austin, Tex. 78767. Tel. 512-444-9611. Established by state legislature to provide back-up source for windstorm insurance in high risk area (14 coastal counties).

***Texas Insurance Advisory Association.** Roy E. Hoga, general manager, P.O. Box 15, Austin, Tex. 78767-0015. Tel. 512-444-9611. Insurers' organization to advise the State Insurance Board on property forms, rates, rating procedures and coverages.

***Texas Medical Liability Insurance Underwriting Association.** Joe A. Chilton, general manager, 250 One La Costa, 1016 La Posada Dr., Austin, Tex. 78752. Tel. 512-452-4370. Established by legislature to provide source for medical malpractice insurance.

***Texas Workers' Compensation Assigned Risk Pool.** Charles R. MacKay, CPCU, general manager, 280 One La Costa, Suite 280, 1016 La Posada Dr., Austin, Tex. 78752. Tel. 512-458-9181. Provides workers' compensation insurance when unavailable through commercial channels.

Underwriters' Laboratories, Inc. Jack Bono, president, 333 Pfingsten Rd., Northbrook, Ill. 60062. Tel. 312-272-8800. Investigates and tests electrical materials and other products to determine that fire prevention and protection standards are being met.

Underwriters Salvage Company. Christopher Knowles, chairman of the board, 1270 W. Northwest Highway, Palatine, Ill. 60067. Tel. 312-595-2542. Assists insurers in adjustment of losses through the reclamation, reconditioning and disposition of damaged goods.

***Washington Insurance Council.** Vance Fredrickson, president, 1218 Third Ave., Seattle, Wash. 98101. Tel. 206-624-3927. Provides education and information services to the public and to insurance companies, producer organizations and other professional insurance groups.

***Western Insurance Information Service.** James A. Snyder, executive director, 17291 Irvine Blvd., Suite 412, Tustin, Calif. 92680. Tel. 714-730-1555. A consumer education service supported by the property/casualty insurance industry, operating in 10 western states.

Workers Compensation Research Institute. Dr. Richard B. Victor, executive director, 245 First St., Suite 1402, Cambridge, Mass. 02141. Tel. 617-494-1240. Organization supported by insurers and employers conducting independent, objective research on public policy issues in the workers' compensation system.

Member Companies and Groups, Insurance Information Institute

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Aetna Casualty & Surety Co. of America
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American General Fire and Casualty Co.
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Chubb Group of Insurance Companies
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Chubb Custom Insurance Co.
Chubb Lloyds of Texas
Federal Insurance Co.
Great Northern Insurance Co.
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Northwestern Pacific Indemnity Co.
Pacific Indemnity Co.
Sea Insurance Co., Ltd.
Sumitomo Marine & Fire Insurance Co., Ltd.
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Texas Pacific Indemnity Co.
Vigilant Insurance Co.

CIGNA Group
Alaska Pacific Assurance Co.
Allied Insurance
American Lloyds
Atlantic Employers Insurance Co.
Bankers Standard Fire & Marine
Bankers Standard Insurance Co.
California Union
Century Indemnity Co.
CIGNA Employers Insurance Company
CIGNA Fire Underwriters Insurance Company
CIGNA Insurance Co.
CIGNA Insurance Company of Illinois
CIGNA Insurance Company of the Midwest
CIGNA Insurance Company of Ohio
CIGNA Insurance Company of Texas
CIGNA Property and Casualty Insurance Company
Illinois Union
Indemnity Insurance Co. of North America
Insurance Co. of North America
Pacific Employers Insurance Co.

Continental Insurance Companies
American Loyalty Insurance Co.
Boston Old Colony Insurance Co.
The Buckeye Union Insurance Co.
Commercial Insurance Co. of Newark, New Jersey
The Continental Insurance Co.
The Continental Insurance Co. of New Jersey
The Fidelity and Casualty Co. of New York
Firemen's Insurance Co. of Newark, New Jersey
The Glens Falls Insurance Co.
Kansas City Fire & Marine Insurance Co.
The Mayflower Insurance Co.
National—Ben Franklin Insurance Co. of Illinois
Niagara Fire Insurance Co.

Crum and Forster Corporation
All West Insurance Co.
American Eagle Insurance Co.
California Insurance Company
Commonwealth Lloyds Insurance Co.
Crum and Forster Insurance Co.
Crum and Forster of Ohio
Industrial Indemnity Co.
Industrial Indemnity Co. of Alaska
Industrial Indemnity Co. of Idaho
Industrial Indemnity Co. of the Northwest
Industrial Insurance Co.
Industrial Insurance Co. of Hawaii, Ltd.
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International Insurance Co.
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- Camden Fire Insurance Association
- General Accident Insurance Co. of America
- North Pacific Insurance Co.
- Oregon Automobile Insurance Co.
- Pennsylvania General Insurance Co.
- Potomac Insurance Co. of Illinois

General Reinsurance Corporation
- General Star Indemnity Co.
- General Star National Insurance Co.
- North Star Reinsurance Corporation

Grange Mutual Insurance Co.

The Harford Mutual Insurance Co.

Hartford Insurance Group
- Hartford Accident and Indemnity Co.
- Hartford Casualty Insurance Co.
- Hartford Fire Insurance Co.
- Hartford Insurance Co. of Alabama
- Hartford Insurance Co. of Illinois
- Hartford Insurance Co. of the Midwest
- Hartford Insurance Co. of the Southeast
- Hartford Lloyd's Insurance Co.
- New York Underwriters Insurance Co.
- Nutmeg Insurance Co.
- Pacific Insurance Co., Ltd.
- Sentinel Insurance Co., Ltd.
- Twin City Fire Insurance Co.

Holyoke Mutual Insurance Co. in Salem

The Home Group
- City Insurance Co.
- The Home Indemnity Co.
- The Home Insurance Company
- Home Insurance Company of Illinois
- Home Insurance Co. of Indiana

Kemper Group
- American Manufacturers Mutual Insurance Co.
- American Motorists Insurance Co.
- American Protection Insurance Co.
- Economy Fire & Casualty Co.
- Economy Preferred
- Federal Kemper Insurance Co.
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- Metropolitan Casualty Insurance Co.
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New York Casualty Insurance Co.

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- Blue Ridge Insurance Co.
- Republic Insurance Co.
- Republic-Underwriters Insurance Co.
- Republic-Vanguard Insurance Co.
- Vanguard Insurance Co.
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Royal Insurance
- American and Foreign Insurance Co.
- Globe Indemnity Co.
- Newark Insurance Co.
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Selective Insurance Group, Inc.
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- Constitution State Insurance Co.
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- The Travelers Lloyds Insurance Co.

Trenwick Group Inc.
- Trenwick America Reinsurance

Union Mutual Companies of Vermont
- New England Guaranty Insurance Co.
- Union Mutual Fire Insurance Co.

USAA Group
- United Services Automobile Association (USAA)
- USAA Casualty Insurance Co.
- USAA General Indemnity Co.

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- Fidelity and Guaranty Insurance Co.
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